TA-F222ES

SERVICE MANUAL

US Model
AEP Model
UK Model
E Model

SONY
AUDIO CURRENT TRANSFER
BALANCE
TA-F222ES

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

US model

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
With 8-ohm loads, both channels driven, from 20 - 20,000 Hz; rated 80 watts per channel minimum RMS power, with no more than 0.006% total harmonic distortion from 250 milliwatts to rated output.

OTHER SPECIFICATIONS

Amplifier section

Continuous RMS power output
(both channels driven simultaneously)
AEP, UK, E model
At 20 Hz - 20 kHz
80 + 80 watts (0.006% THD, 8 ohms)
At 1 kHz
100 + 100 watts (0.006% THD, 6 ohms)
US model
At 20 Hz - 20 kHz
80 + 80 watts (0.006% THD, 8 ohms)

Power bandwidth (IHF)
10 Hz - 80 kHz

Dynamic headroom
1.2 dB ('78 IHF)

Harmonic distortion
Less than 0.005 % at 10 watts (6 ohms)
Less than 0.004 % at 10 watts (8 ohms)

Intermodulation (IM) distortion
(60 Hz : 7 kHz = 4 : 1) Less than 0.006 % at rated output (6 ohms)
Less than 0.006 % at rated output (8 ohms)

— Continued on page 2 —

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

MICROFILM

INTEGRATED STEREO AMPLIFIER

SONY®

AUD

Slew rate 125 V/μ sec.
250 V/μ sec. (inside)
Dynamic range TUNER, CD, TAPE 1,2, VIDEO 1,2 : 120dB
Channel separation
(at 1 kHz) PHONO MC : 80 dB
MM : 95 dB
TUNER, CD, TAPE 1,2, VIDEO 1,2 : 100dB
Frequency response
PHONO : RIAA equalization curve ±0.2 dB
TUNER, CD, TAPE 1,2, VIDEO 1,2 (audio) } 5 Hz - 200 kHz $^{+0}_{-3}$ dB

Residual noise Less than 25 μV (8 ohms, network A)
Damping factor 125 (8 ohms, 1 kHz)
Inputs

	Setting of the CARTRIDGE load selector	Sensitivity	Impedance	Maximum input capability (1 kHz)	S/N (weighting network, input level)
PHONO	MM	2.5 mV	50 kilohms	150 mV	87 dB 83 dB* (A, 2.5 mV)
	MC	0.17 mV	100 ohms	9 mV	68 dB 71 dB* (A, 170 μV)
TUNER, CD TAPE 1, 2 VIDEO 1,2 (audio)		150 mV	50 kilohms		97 dB 102 dB* (A, 150 mV)

* '78 IHF

VIDEO 1,2
Voltage 1 Vp-p
Impedance 75 ohms
Outputs REC OUT 1
Voltage 150 mV
Impedance 1 kilohms
SPEAKER A, B
Accepts speakers of 6 - 16 ohms.
HEADPHONES
Accepts low and high impedance headphones.
VIDEO 1 OUT (audio) 150 mV 1 kilohms
VIDEO 1 OUT 1 Vp-p 75 ohms

Tone controls BASS
±8 dB at 60 Hz (turnover freq. 300 Hz)
TREBLE
±6 dB at 10 kHz (turnover freq. 5 kHz)
Bass boost + 5 dB at 50 Hz
Subsonic filter 6 dB/octave attenuation below 15 Hz

General

System Integrated stereo amplifier
Power amplifier section
Legato linear, pure-complementary, Darlington OCL SEPP amplifier
Preamplifier section
Equalizer section : Low-noise equalizer amp (MC or MM cartridge load selectable)
Audio Current Transfer section : Bridge-balance type voltage-to-current converter with dc servo amp
Power requirements
AEP model: 220 V ac, 50/60 Hz
UK model: 240 V ac, 50 Hz
US model: 120 V ac, 60 Hz
E model: 120, 220, or 240 V ac adjustable, 50/60 Hz
Power consumption
AEP, UK, E model: 200 W
US model: 250 W
AC outlets AEP, UK model: 1 switched, 100 watts max.
US model: 2 switched, total 100 watts max.
2 unswitched, total 100 watts max.
E model: 1 switched, 100 watts max.
1 unswitched 100 watts max.
Dimensions Approx. 430 x 130 x 375 mm (w/h/d)
(17 x 5 1/8 x 14 7/8 inches)
including projecting parts and controls
Weight AEP, UK, E model:
Approx. 11.5 kg (25 lbs 6 oz) net
Approx. 13 kg (28 lbs 11 oz) in shipping carton
US model:
Approx. 12.1 kg (26 lbs 11 oz) net
Approx. 13.6 kg (30 lbs) in shipping carton

SAFETY CHECK-OUT (US Model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

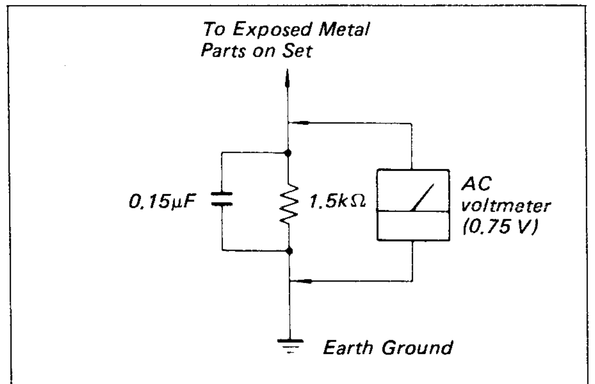
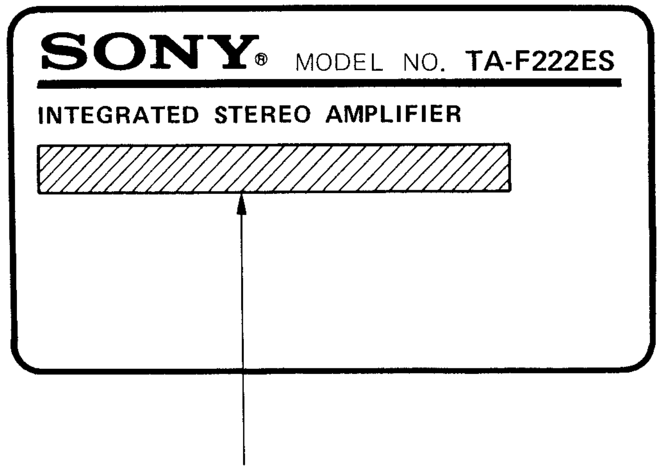


Fig. A. Using an AC voltmeter to check AC leakage.

* * *

MODEL IDENTIFICATION

—Specification Label—



US Model:	AC:	120 V ~ 60 Hz	200 W
AEP Model:	AC:	220 V ~ 50/60 Hz	200 W
UK Model:	AC:	240 V ~ 50/60 Hz	200 W
E Model:	AC:	120/220/240 V ~ 50/60 Hz	200 W
G•AEP Model:	AC:	220 V ~ 50/60 Hz	200 W

SECTION 1
DISASSEMBLY

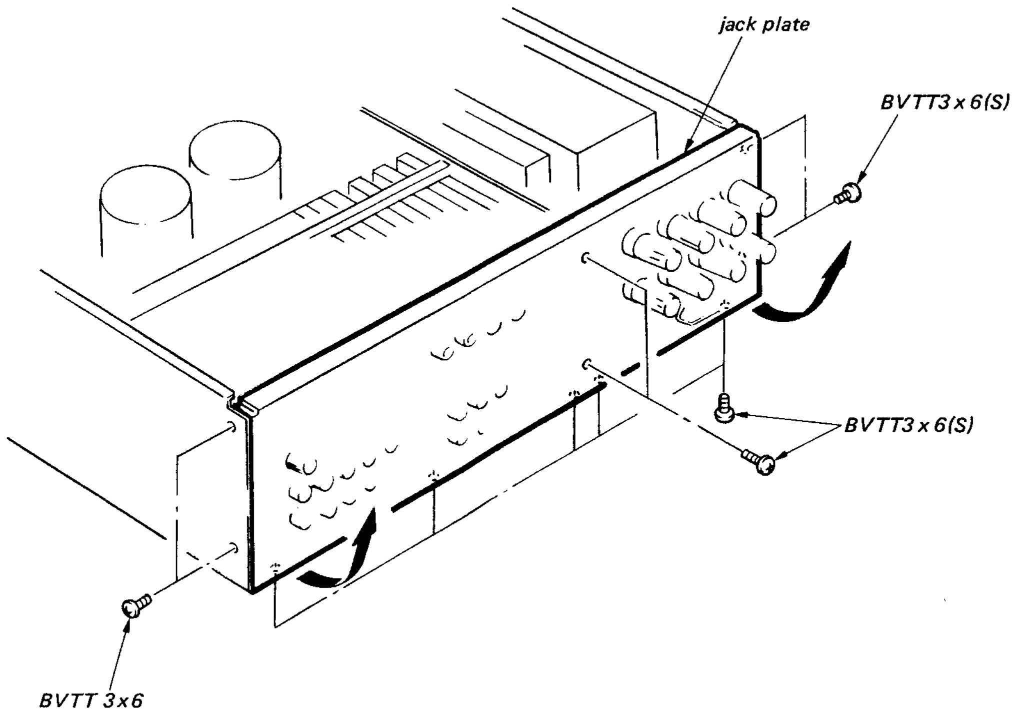
TOP COVER

Remove four top cover screws.

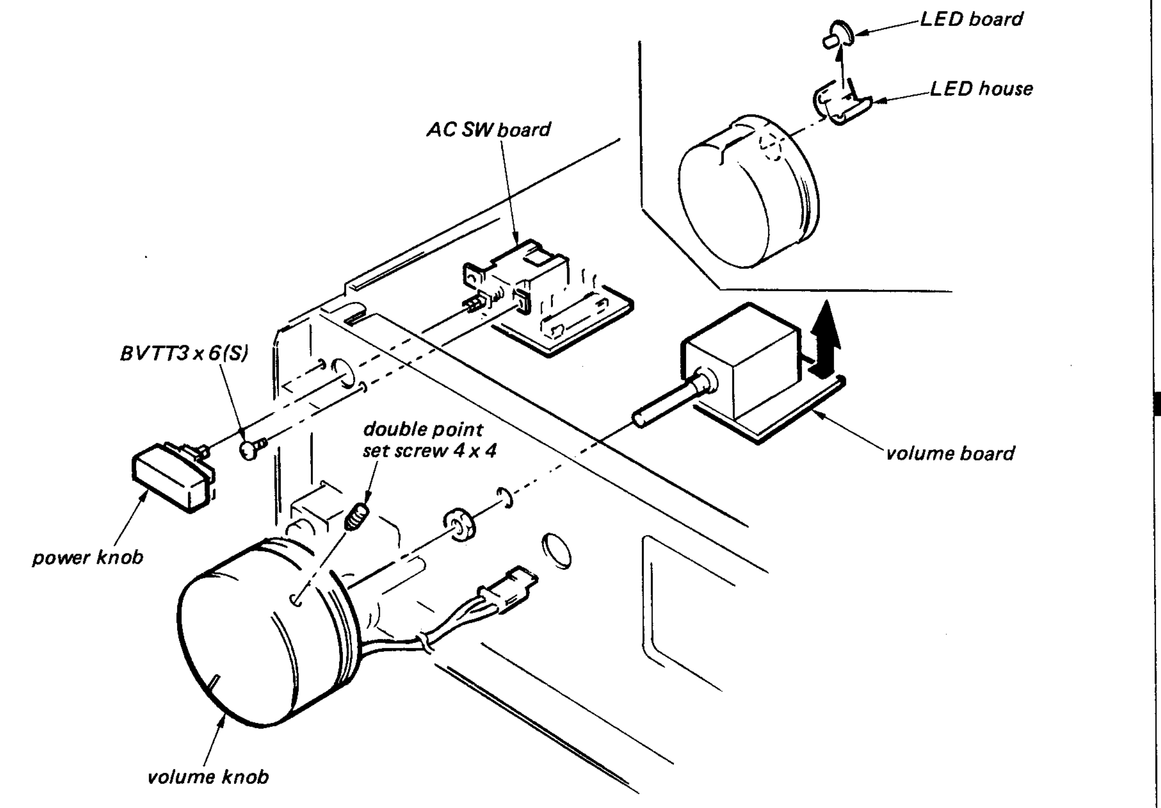
FRONT PANEL

Remove six screws at top and bottom sides.

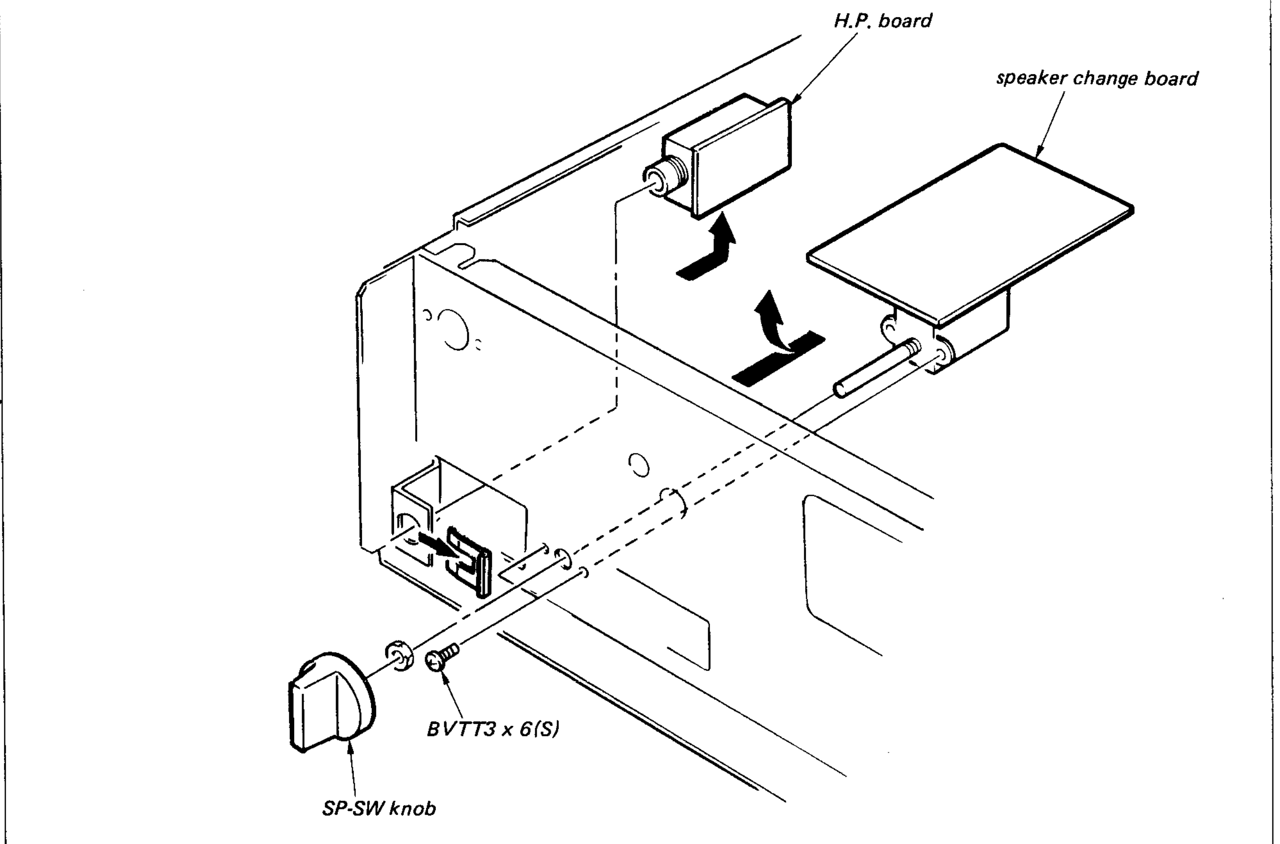
JACK PLATE



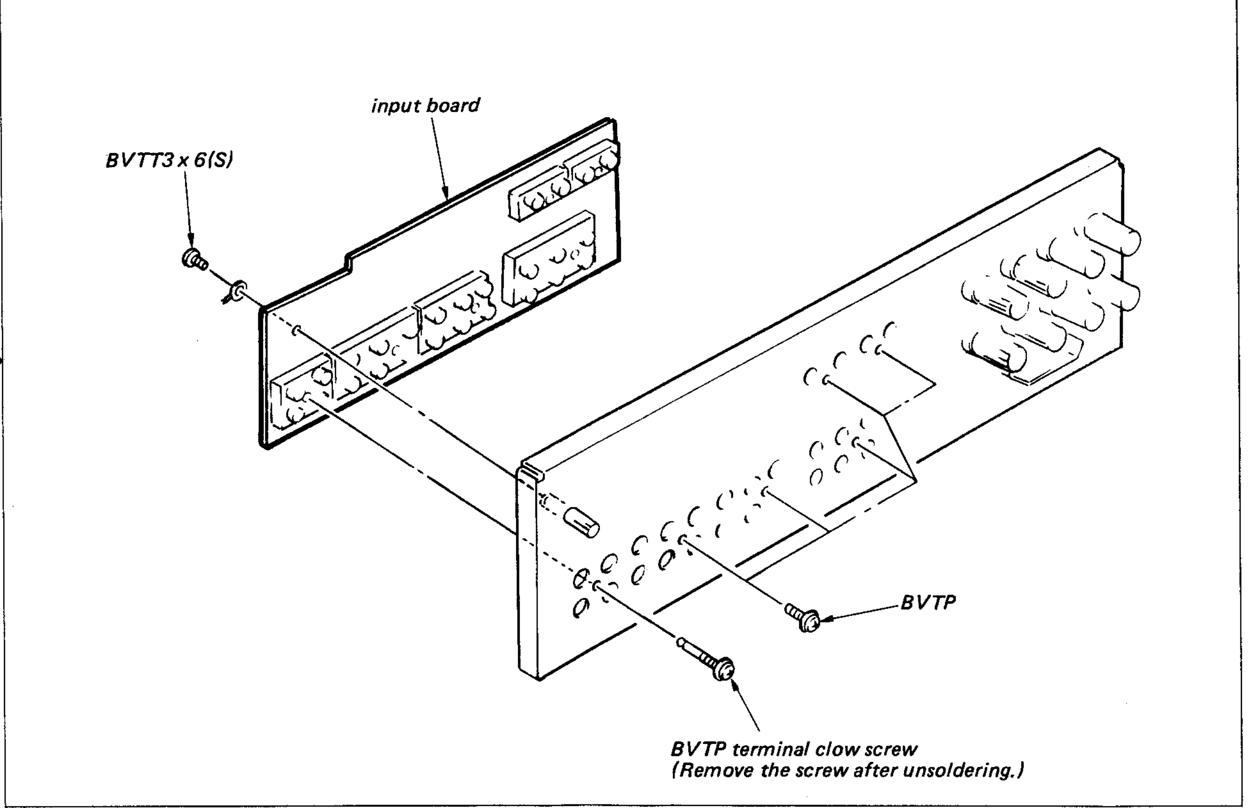
AC SW BOARD/VOLUME BOARD/LED BOARD


LED board
LED house
AC SW board
BVTT3 x 6(S)
double point set screw 4 x 4
volume board
power knob
volume knob

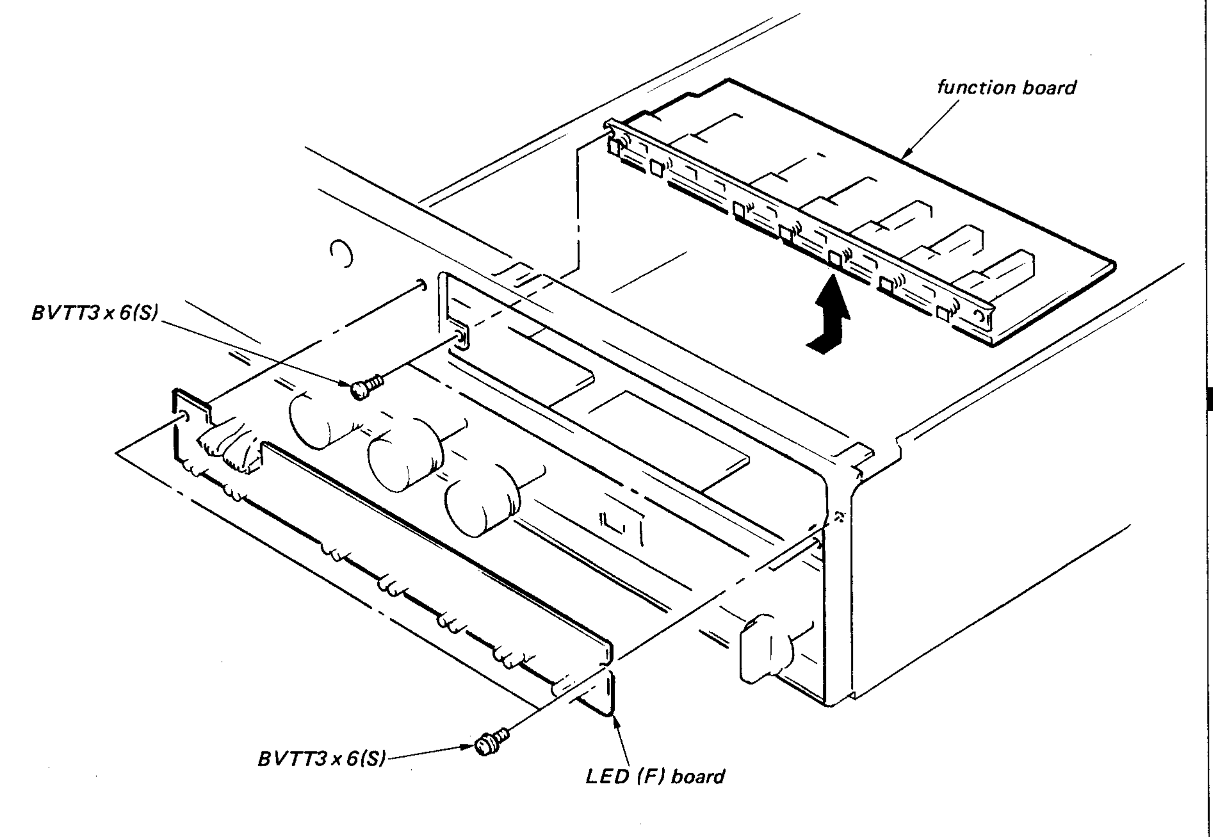
H.P. BOARD/SPEAKER CHANGE BOARD


H.P. board
speaker change board
BVTT3 x 6(S)
SP-SW knob

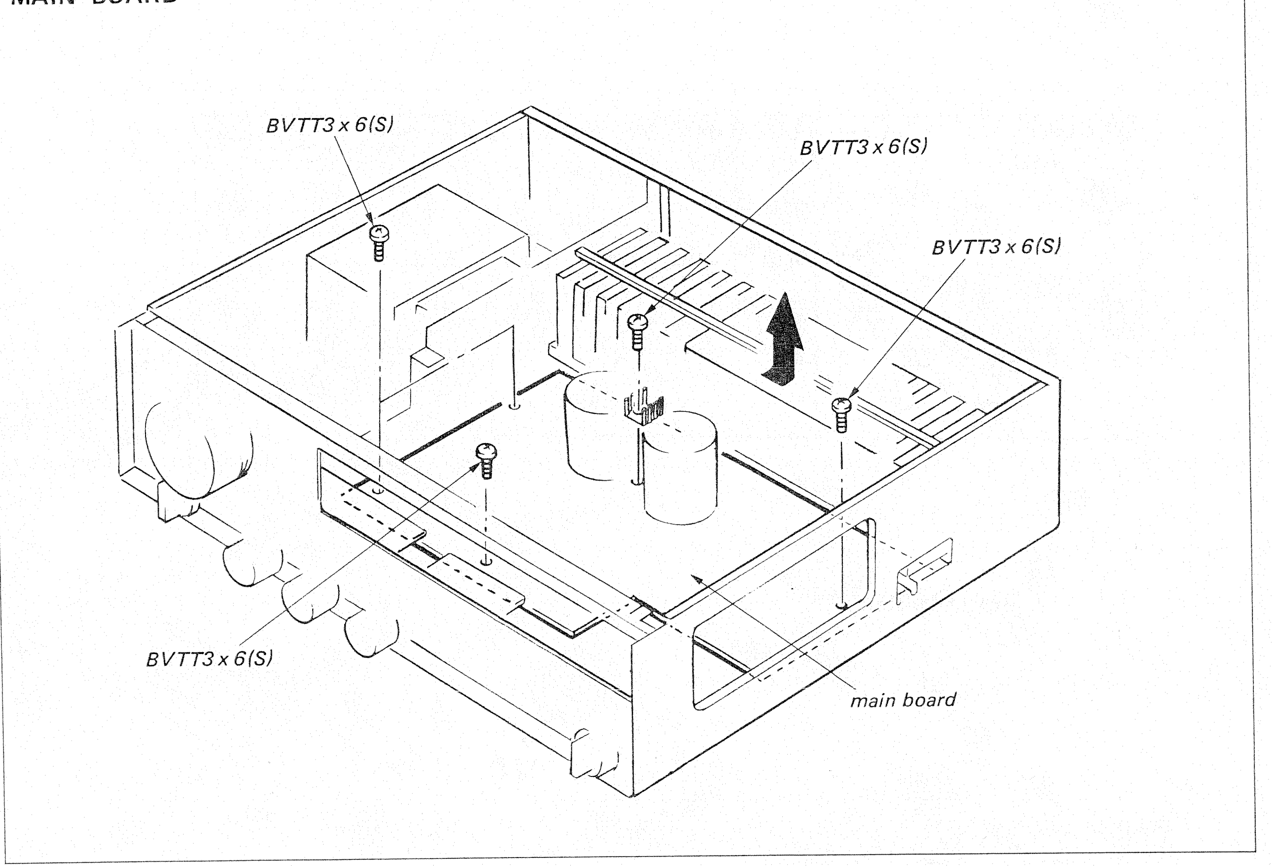
INPUT BOARD


input board
BVTT3 x 6(S)
BVTP
BVTP terminal clow screw
(Remove the screw after unsoldering.)

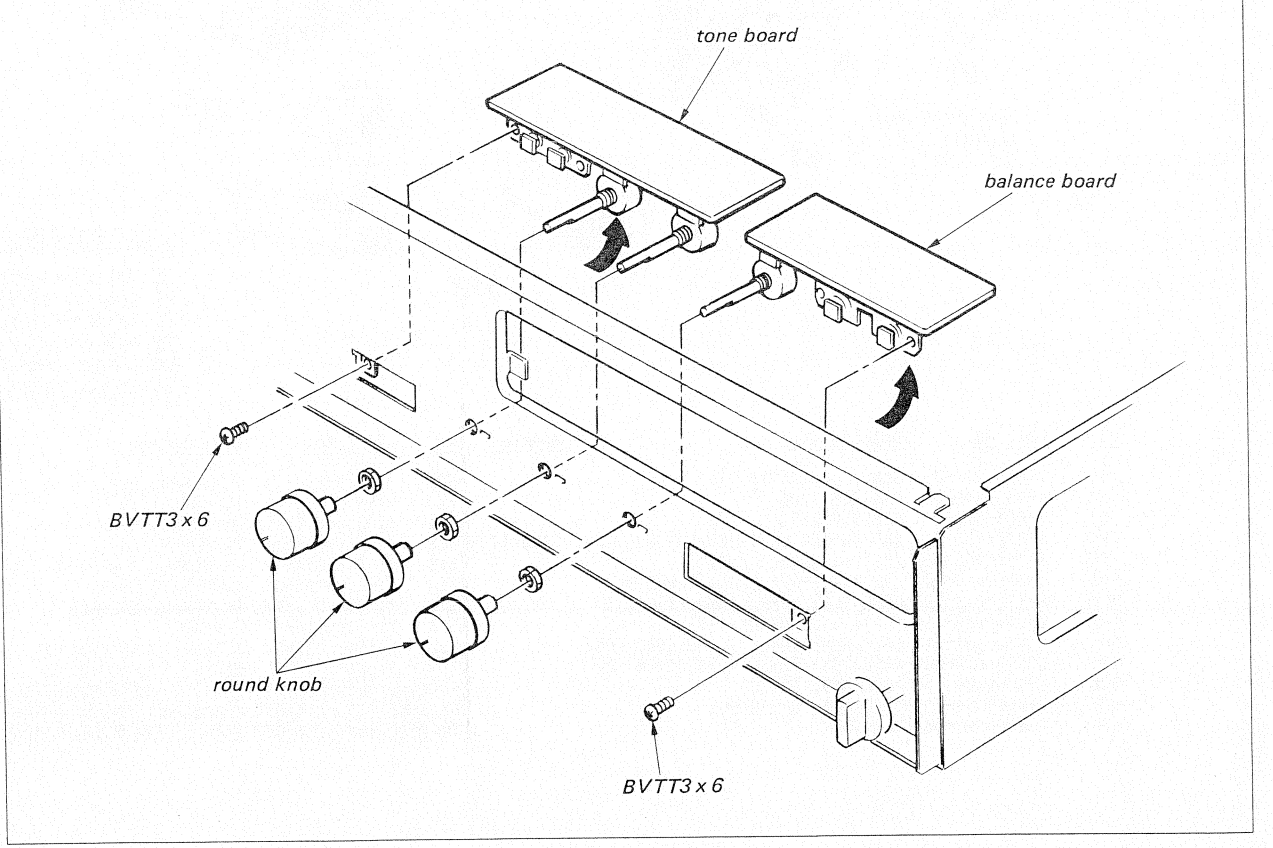
FUNCTION BOARD/LED (F) BOARD


function board
BVTT3 x 6(S)
BVTT3 x 6(S)
LED (F) board

MAIN BOARD


BVTT3 x 6(S)
BVTT3 x 6(S)
BVTT3 x 6(S)
BVTT3 x 6(S)
main board

TONE BOARD/BALANCE BOARD


tone board
balance board
BVTT3 x 6
round knob
BVTT3 x 6

SECTION 2
ADJUSTMENTS

Note:

1. When repairing or replacing the power transistors, be sure to replace the resistors (R526–531 or R576–581) in power section and make the DC BIAS adjustment.
2. Set the VOLUME switch to MIN before the POWER switch in turned on. Turn RT501 and RT551 counterclockwise.
3. Wait for about 5 minutes to warm up the set after the power switch is turned on and make the DC BIAS adjustment.

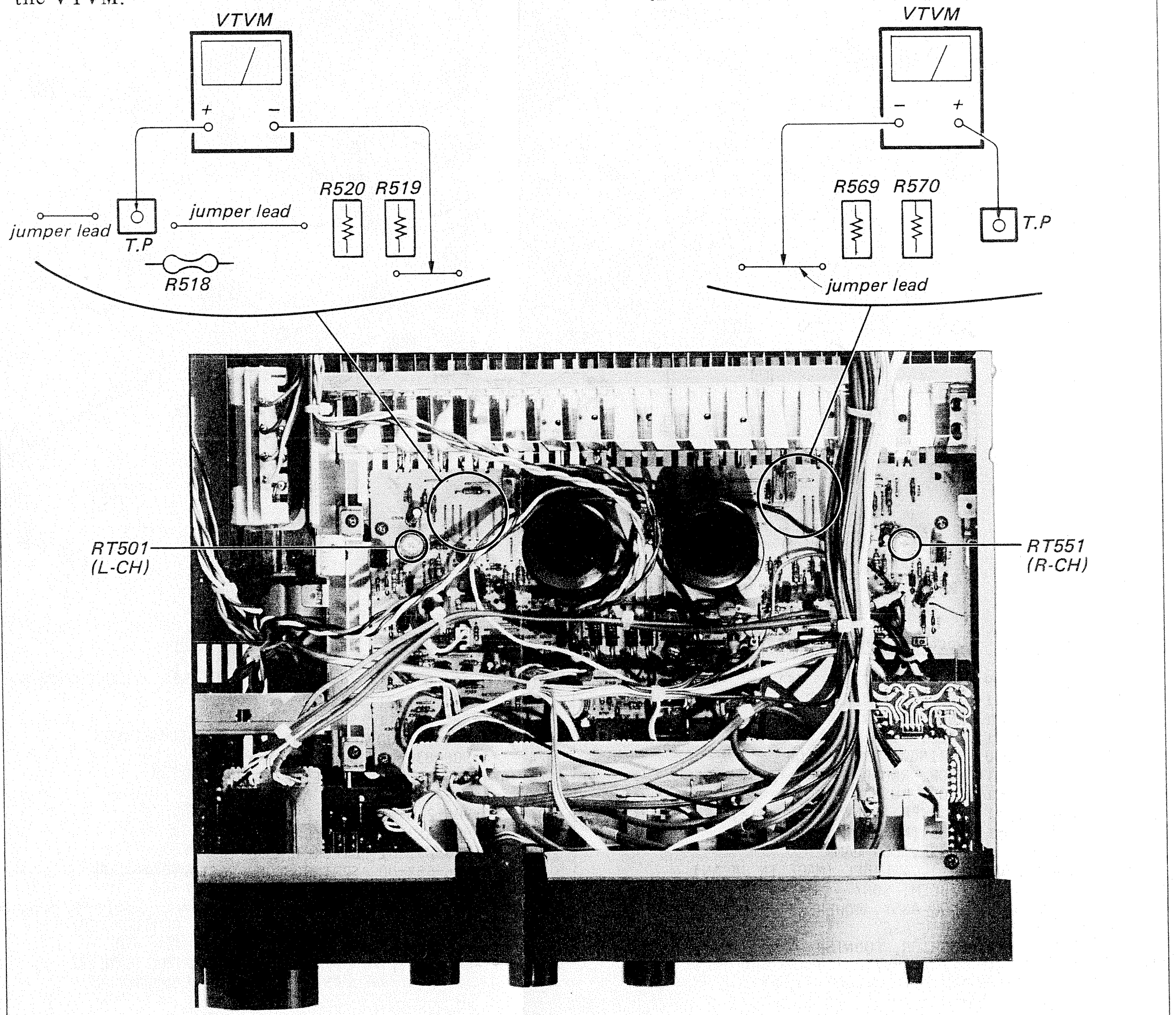
DC BIAS ADJUSTMENT (with no signal input)

– L-CH –

Adjust RT501 for 6mV reading on the VTVM.

–R-CH –

Adjust RT551 for 6mV reading on the VTVM.


VTVM
+
−
jumper lead
T.P
jumper lead
R518
R520
R519
RT501 (L-CH)
VTVM
−
+
R569
R570
T.P
jumper lead
RT551 (R-CH)

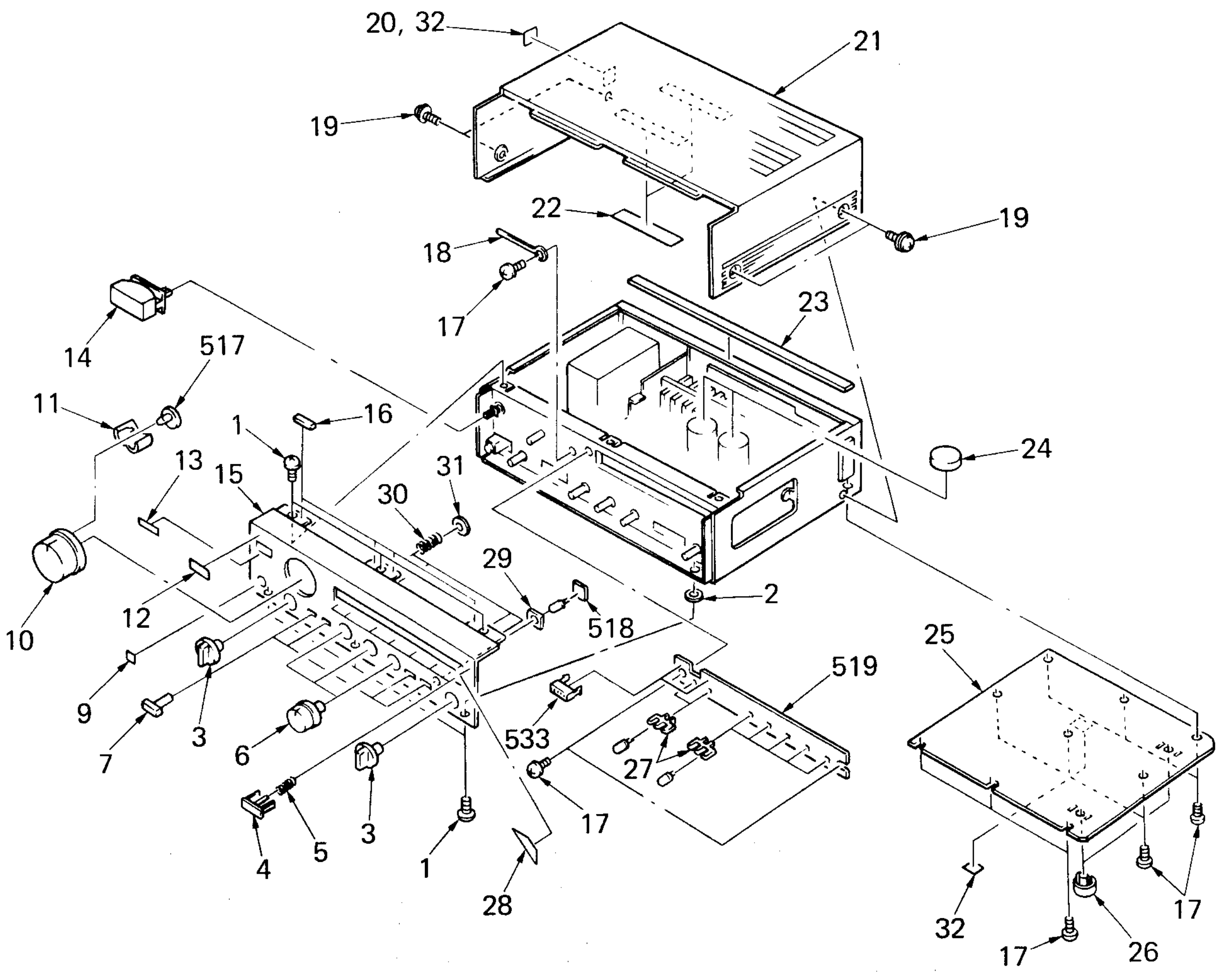
SECTION 3
EXPLODED VIEW AND PARTS LIST

NOTE:
The mechanical parts with no reference number in the exploded views are not supplied.

- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

(1).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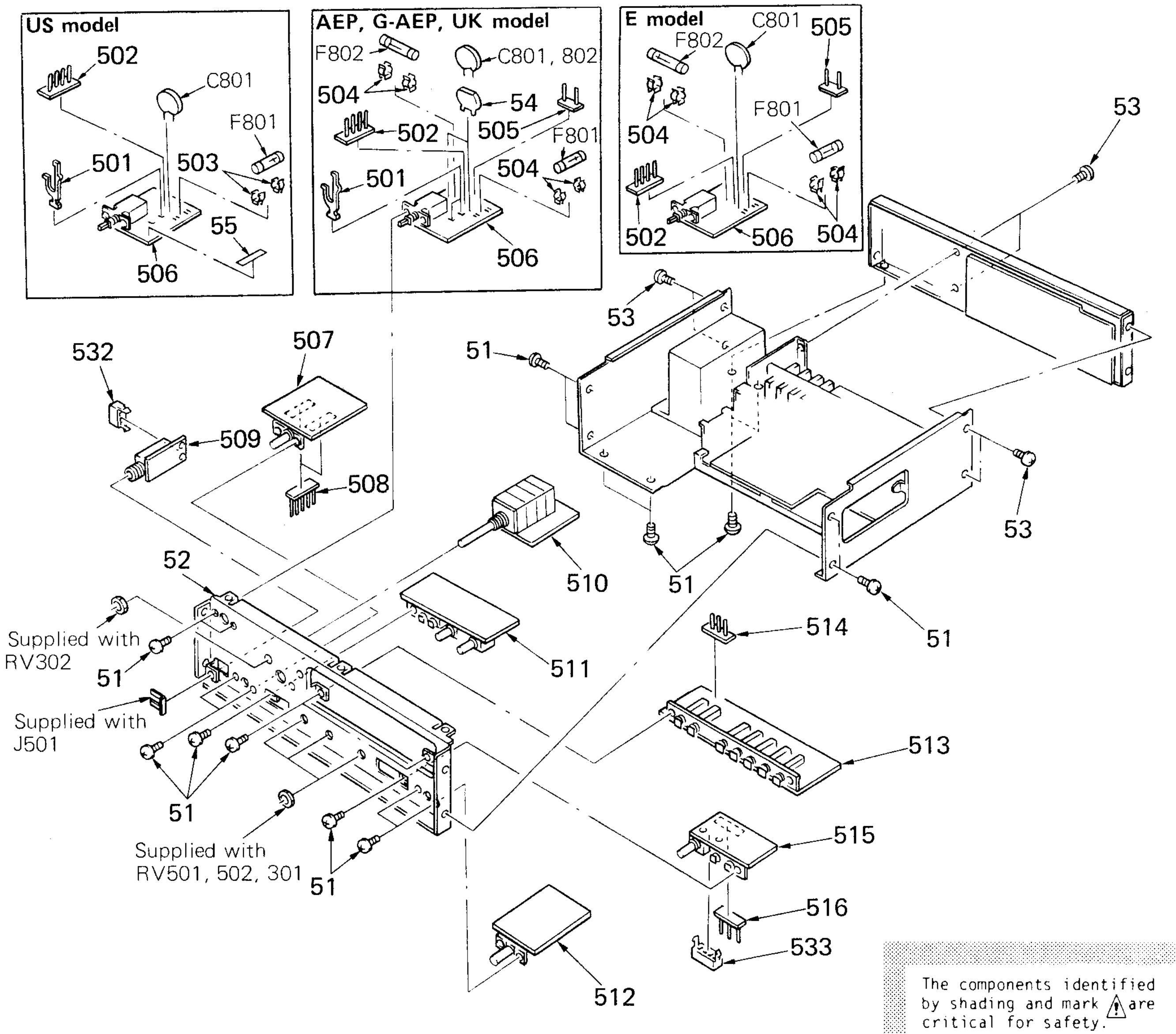
No.	Part No.	Description	Remarks
1	7-685-751-09	SCREW +BVTT 3X6 (S)	
2	4-402-063-11	SHEET, INSULATING	
3	4-908-838-01	KNOB, SQUARE	
4	4-908-836-01	KNOB, PUSH	
5	2-267-020-00	SPRING, COMPRESSION	
6	4-908-839-01	KNOB, ROUND	
7	4-885-956-01	KNOB, PUSH	
9	3-703-710-41	STICKER, SONY SYMBOL (12)	
10	X-4885-908-1	KNOB (NA-50) ASSY, R	
11	*4-901-919-00	HOUSE, LED LAMP	
12	*3-701-690-00	(UK)....LABEL (MADE IN JAPAN)	
13	3-304-974-01	EMBLEM, SONY	
14	X-4885-901-0	KNOB ASSY, POWER	
15	X-4885-915-1	PANEL ASSY	
16	9-911-845-XX	CUSHION, COUNTER	
17	7-685-871-01	SCREW +BVTT 3X6 (S)	
18	*3-701-822-00	HOLDER, WIRE	
19	4-889-321-11	SCREW	
20	3-703-079-21	(UK)...LABEL, CAUTION (BACK)	
21	4-885-927-21	CASE	
22	*4-885-983-11	SHEET	
23	*4-848-642-00	CUSHION, VIBRATION	
24	*4-908-834-01	CUSHION	
25	*4-885-922-02	PLATE, BOTTOM	
26	X-4864-303-0	FOOT ASSY	
27	*4-905-210-01	HOLDER, LED	
28	4-889-813-21	STICKER (C)	
29	*4-908-835-01	BRACKET, LED	
30	4-866-652-00	SPRING, COMPRESSION	
31	4-862-338-00	RING, STOPPER	
32	*3-703-680-00	(US)...LABEL, CAUTION, SUB, NEW UL	
517	*1-616-514-11	PC BOARD, PROTECT LED	
518	*1-616-519-11	PC BOARD, GEQ LED	
519	*1-616-518-11	PC BOARD, FUNCTION LED	
533	*1-562-249-00	SOCKET, CONNECTOR 4P	

(2).


US model
502
C801
F801
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AEP, G-AEP, UK model
F802
C801, 802
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F801
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E model
C801
F802
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F801
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Supplied with RV302
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Supplied with J501
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Supplied with RV501, 502, 301
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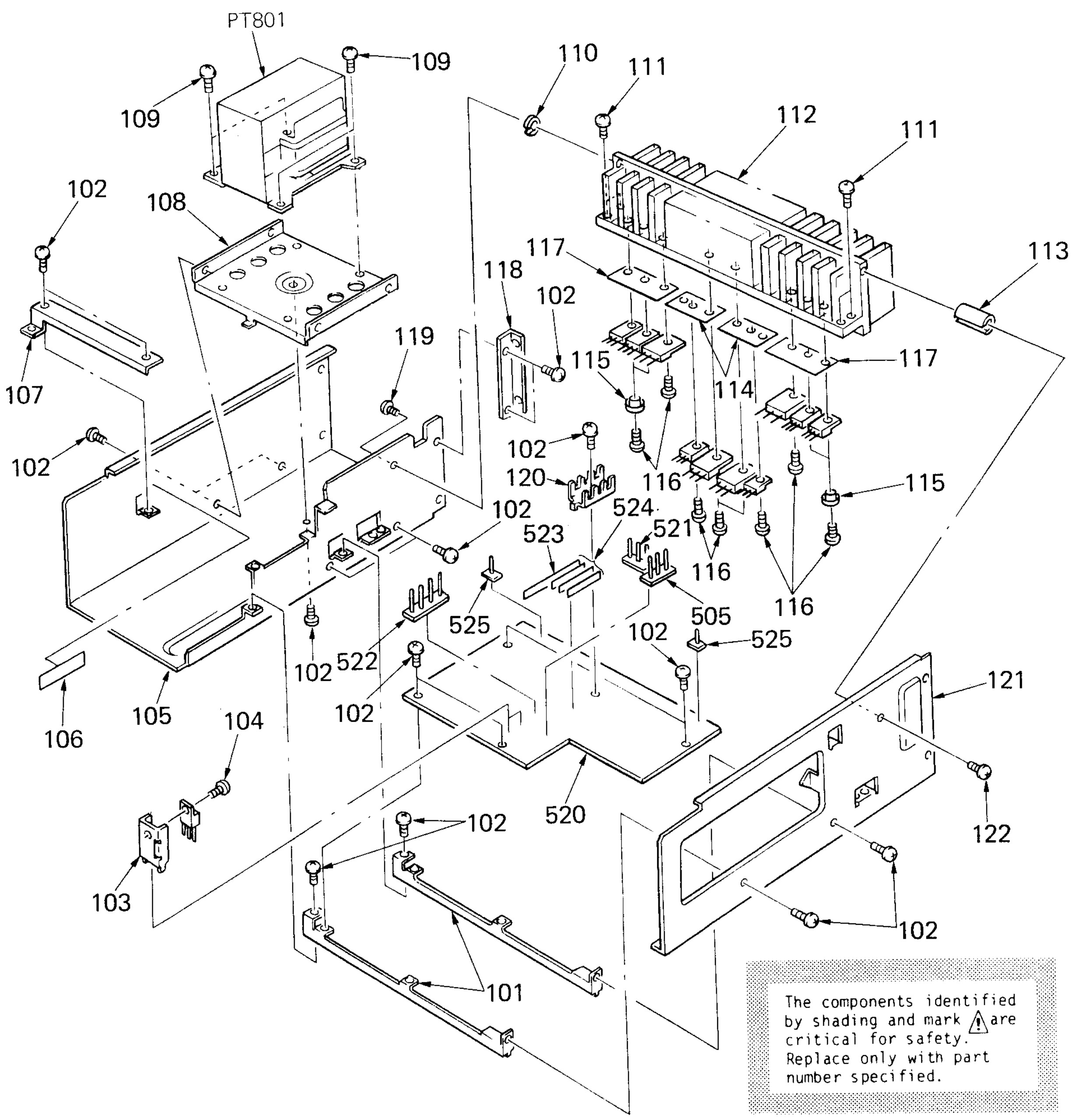
The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

No.	Part No.	Description	Remarks
51	7-685-871-01	SCREW +BVTT 3X6 (S)	
52	*4-908-840-01	CHASSIS, SUB	
53	7-685-751-09	SCREW +BVTT 3X6 (S)	
54	4-875-455-01	(AEP,G-AEP,UK)...COVER (DIA.20), CAPACITOR	
55	3-701-946-21	(US)....LABEL, FUSE	
501	1-535-416-00	(US,AEP,G-AEP,UK)...TERMINAL	
502	*1-535-141-00	BASE POST 22MM (10MM PITCH) 4P	
503	1-533-185-11	(US)......HOLDER, FUSE	
504	1-533-183-11	(AEP,G-AEP,UK,E)...HOLDER, FUSE	
505	*1-535-139-00	BASE POST 22MM (10MM PITCH) 2P	
506	*1-616-509-11	PC BOARD, AC-SW	
507	*1-616-506-11	PC BOARD, SP CHANGE	
508	*1-535-118-00	TERMINAL	
509	*1-616-517-11	PC BOARD, H.P.	
510	*1-616-515-11	PC BOARD, VR	
511	*1-616-516-12	PC BOARD, TONE	
512	*1-616-511-11	PC BOARD, EQ	
513	*1-616-512-12	PC BOARD, FUNCTION	
514	*1-508-810-00	14MM BASE POST	
515	*1-616-513-11	PC BOARD, BALANCE	
516	*1-535-116-00	TERMINAL	
532	*1-562-327-00	SOCKET, CONNECTOR 3P	
533	*1-562-249-00	SOCKET, CONNECTOR 4P	
F801 ⚠	.1-532-272-XX	(US).....FUSE 5.0A	
F801 ⚠	.1-532-286-00	(AEP,G-AEP,UK,E)...FUSE 2.5A TIME-LAG	
F802 ⚠	.1-532-286-00	(AEP,G-AEP,UK,E)...FUSE 2.5A TIME-LAG	

(3).


PT801
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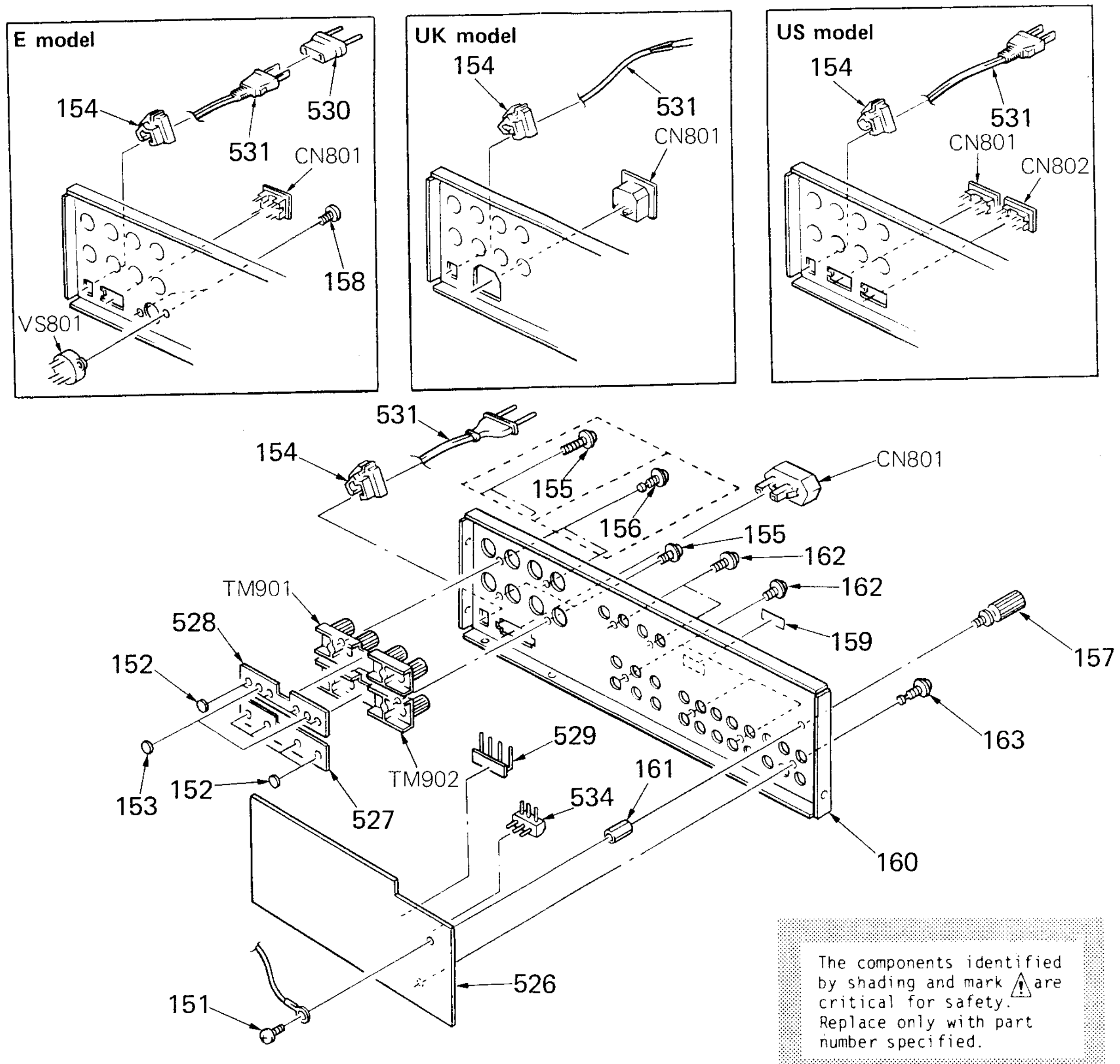
The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

No.	Part No.	Description	Remarks
101	*4-889-824-00	CHANNEL	
102	7-685-871-01	SCREW +BVTT 3X6 (S)	
103	*3-309-144-01	HEAT SINK	
104	2-259-121-11	SCREW, TR	
105	*4-889-829-00	PLATE, SIDE, LEFT	
106	*3-703-044-26	(US)....LABEL, CAUTION	
107	*4-885-980-01	REINFORCEMENT	
108	*4-885-916-00	BRACKET, TRANSFORMER	
109	7-685-881-01	SCREW +BVTT 4X8 (S)	
110	4-908-811-01	SPACER	
111	7-685-876-01	SCREW +BVTT 3X16 (S)	
112	*4-885-998-11	HEAT SINK	
113	4-908-809-01	SPACER	
114	*4-885-995-01	SHEET, INSULATING	
115	2-371-561-00	BUSHING (P), INSULATING	
116	2-259-121-21	SCREW, TR	
117	*4-908-815-01	SHEET, INSULATING	
118	*4-889-819-00	BRACKET	

No.	Part No.	Description	Remarks
119	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
120	*4-880-404-01	(AEP,G-AEP,UK,E).......PLATE, GROUND	
	*4-880-404-11	(US)....PLATE, GROUND, CONCENTRATION	
121	*4-889-826-00	PLATE, SIDE, RIGHT	
122	7-685-649-19	SCREW +BVTP 3X14 TYPE2 N-S	
505	*1-535-139-00	BASE POST 22MM (10MM PITCH) 2P	
520	*A-4388-480-A	(US).........MOUNTED PCB, MAIN	
	*A-4388-481-A	(AEP,UK,E)...MOUNTED PCB, MAIN	
	*A-4388-482-A	(G-AEP)......MOUNTED PCB, MAIN	
521	*1-535-115-00	TERMINAL	
522	*1-535-117-00	TERMINAL	
523	*1-560-242-11	BUS BAR 3P	
524	*1-560-242-61	BUS BAR 2P	
525	*1-535-114-00	TERMINAL	
PT801⚠	1-448-173-11	(US)..........TRANSFORMER, POWER	
PT801⚠	1-448-264-11	(UK)..........TRANSFORMER, POWER	
PT801⚠	1-448-265-11	(E)...........TRANSFORMER, POWER	
PT801⚠	1-448-266-11	(AEP,G-AEP)...TRANSFORMER, POWER	

(4).


E model
154
530
531
CN801
158
VS801
UK model
154
531
CN801
US model
154
531
CN801
CN802
531
154
155
CN801
156
155
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162
TM901
528
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TM902
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526
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The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

No.	Part No.	Description	Remarks
151	7-685-871-01	SCREW +BVTT 3X6 (S)	
152	*4-843-416-11	(G-AEP)...PLATE, FIXED, CAP	
153	*4-908-843-01	(G-AEP)...PLATE	
154	3-703-244-00	(US,AEP,G-AEP,UK)....BUSHING (2104), CORD	
	3-703-571-00	(E)................BUSHING (S)(4516), CORD	
155	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
156	3-703-473-00	(G-AEP)...SCREW, TERMINAL	
157	X-4854-207-0	TERMINAL ASSY, GROUND	
158	7-685-751-09	SCREW +BVTT 3X6 (S)	
159	*4-908-827-01	(US)......LABEL, MODEL NUMBER (U2)	
	*4-908-828-01	(E).......LABEL, MODEL NUMBER (E2/3)	
	*4-908-829-01	(AEP).....LABEL, MODEL NUMBER (AE1)	
	*4-908-830-01	(G-AEP)...LABEL, MODEL NUMBER (AE4)	
	*4-908-831-01	(UK)......LABEL, MODEL NUMBER (UK1)	
160	*4-908-842-11	(US)..........PLATE, JACK	
	*4-908-842-21	(AEP,G-AEP)...PLATE, JACK	
	*4-908-842-31	(UK)..........PLATE, JACK	
	*4-908-842-41	(E)...........PLATE, JACK	
161	*2-280-622-41	SUPPORT (M3), HEXAGON	
162	3-701-589-21	SCREW, SELF-TAPPING	

No.	Part No.	Description	Remarks
163	4-887-711-21	SCREW, TERMINAL, CLAW, +BVTP	
526	*1-616-505-12	PC BOARD, INPUT	
527	*1-616-507-11	(G-AEP)...PC BOARD, SP-B	
528	*1-616-508-11	(G-AEP)...PC BOARD, SP-A	
529	*1-508-831-12	H TYPE BASE POST	
530	⚠1-526-565-00	(E)....AC PLUG ADAPTOR	
531	⚠1-551-884-00	(UK)..........CORD, POWER	
	⚠1-555-795-00	(AEP,G-AEP)...CORD, POWER	
	⚠1-556-091-00	(E)...........CORD, POWER	
	⚠1-557-577-11	(US)..........CORD, POWER	
534	*1-508-878-00	BASE POST	
CN801⚠	1-526-695-00	(E)...........OUTLET, AC (2 GANG)	
CN801⚠	1-526-751-00	(UK)..........OUTLET, AC	
CN801⚠	1-526-794-11	(AEP,G-AEP)...OUTLET, AC	
CN801⚠	1-526-883-00	(US)..........OUTLET, AC	
CN802⚠	1-526-883-00	(US)..........OUTLET, AC	
TM901	1-536-767-00	TERMINAL BOARD, SPEAKER	
TM902	1-536-767-00	TERMINAL BOARD, SPEAKER	
VS801⚠	1-526-576-31	(E)...SELECTOR, POWER VOLTAGE	

SECTION 4
ELECTRICAL PARTS LIST

NOTE:

- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuitsin a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF:μF, PF:μμF.

RESISTORS
- All resistors are in ohms.
- F : nonflammable

COILS
- MMH : mH, UH : μH

SEMICONDUCTORS
In each case, U : μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC,
UPD...: μPD...

> The components identified by shading and mark ⚠ are critical for safety.
> Replace only with part number specified.

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
501	1-535-416-00	(US,AEP,G-AEP,UK)...TERMINAL			
502	*1-535-141-00	BASE POST 22MM (10MM PITCH) 4P			
503	1-533-185-11	(US)......HOLDER, FUSE			
504	1-533-183-11	(AEP,G-AEP,UK,E)...HOLDER, FUSE			
505	*1-535-139-00	BASE POST 22MM (10MM PITCH) 2P			
506	*1-616-509-11	PC BOARD, AC-SW			
507	*1-616-506-11	PC BOARD, SP CHANGE			
508	*1-535-118-00	TERMINAL			
509	*1-616-517-11	PC BOARD, H.P.			
510	*1-616-515-11	PC BOARD, VR			
511	*1-616-516-12	PC BOARD, TONE			
512	*1-616-511-11	PC BOARD, EQ			
513	*1-616-512-12	PC BOARD, FUNCTION			
514	*1-508-810-00	14MM BASE POST			
515	*1-616-513-11	PC BOARD, BALANCE			
516	*1-535-116-00	TERMINAL			
517	*1-616-514-11	PC BOARD, PROTECT LED			
518	*1-616-519-11	PC BOARD, GEQ LED			
519	*1-616-518-11	PC BOARD, FUNCTION LED			
520	*A-4388-480-A	(US).........MOUNTED PCB, MAIN			
	*A-4388-481-A	(AEP,UK,E)...MOUNTED PCB, MAIN			
	*A-4388-482-A	(G-AEP)......MOUNTED PCB, MAIN			
521	*1-535-115-00	TERMINAL			
522	*1-535-117-00	TERMINAL			
523	*1-560-242-11	BUS BAR 3P			
524	*1-560-242-61	BUS BAR 2P			
525	*1-535-114-00	TERMINAL			
526	*1-616-505-12	PC BOARD, INPUT			
527	*1-616-507-11	(G-AEP)...PC BOARD, SP-B			
528	*1-616-508-11	(G-AEP)...PC BOARD, SP-A			
529	*1-508-831-12	H TYPE BASE POST			
530	⚠.1-526-565-00	(E)....AC PLUG ADAPTOR			
531	⚠.1-551-884-00	(UK).........CORD, POWER			
	⚠.1-555-795-00	(AEP,G-AEP)...CORD, POWER			
	⚠.1-556-091-00	(E)...........CORD, POWER			
	⚠.1-557-577-11	(US)..........CORD, POWER			
532	*1-562-327-00	SOCKET, CONNECTOR 3P			
533	*1-562-249-00	SOCKET, CONNECTOR 4P			
534	*1-508-878-00	BASE POST			
C101	1-161-317-00	CERAMIC	330PF	10%	50V
C201	1-102-112-00	CERAMIC	330PF	10%	50V
C202	1-123-369-00	ELECT	4.7MF	20%	25V
C203	1-161-383-00	CERAMIC	0.0047MF	10%	50V
C204	1-123-333-00	ELECT	100MF	20%	16V
C205	1-130-341-00	FILM	0.056MF	3%	100V
C206	1-130-971-00	FILM	0.016MF	3%	100V
C207	1-124-183-00	ELECT	2.2MF	20%	50V
C208	1-123-307-00	ELECT	100MF	20%	10V
C209	1-123-330-00	ELECT	22MF	20%	25V
C210	1-123-330-00	ELECT	22MF	20%	25V
C251	1-102-112-00	CERAMIC	330PF	10%	50V
C252	1-123-369-00	ELECT	4.7MF	20%	25V
C253	1-161-383-00	CERAMIC	0.0047MF	10%	50V
C254	1-123-333-00	ELECT	100MF	20%	16V
C255	1-130-341-00	FILM	0.056MF	3%	100V
C256	1-130-971-00	FILM	0.016MF	3%	100V
C257	1-124-183-00	ELECT	2.2MF	20%	50V
C258	1-123-307-00	ELECT	100MF	20%	10V
C301	1-136-169-00	FILM	0.22MF	5%	50V
C302	1-124-183-00	ELECT	2.2MF	20%	50V
C303	1-124-183-00	ELECT	2.2MF	20%	50V
C304	1-124-183-00	ELECT	2.2MF	20%	50V
C305	1-123-330-00	ELECT	22MF	20%	25V
C306	1-123-330-00	ELECT	22MF	20%	25V
C351	1-136-169-00	FILM	0.22MF	5%	50V
C352	1-124-183-00	ELECT	2.2MF	20%	50V
C353	1-124-183-00	ELECT	2.2MF	20%	50V
C354	1-124-183-00	ELECT	2.2MF	20%	50V
C401	1-123-645-00	ELECT	33MF	20%	10V
C402	1-123-311-00	ELECT	1000MF	20%	10V
C403	1-123-645-00	ELECT	33MF	20%	10V
C404	1-123-311-00	ELECT	1000MF	20%	10V
C405	1-123-645-00	ELECT	33MF	20%	10V
C406	1-123-645-00	ELECT	33MF	20%	10V
C407	1-123-645-00	ELECT	33MF	20%	10V
C501	1-102-110-00	CERAMIC	220PF	10%	50V
C502	1-102-945-00	CERAMIC	8PF	1PF	50V
C503	1-123-306-00	ELECT	47MF	20%	10V
C504	1-123-307-00	ELECT	100MF	20%	10V
C505	1-123-306-00	ELECT	47MF	20%	10V
C506	1-124-183-00	ELECT	2.2MF	20%	50V
C507	1-102-947-00	CERAMIC	10PF	5%	50V
C508	1-124-186-00	ELECT	10MF	20%	50V
C509	1-102-127-21	CERAMIC	0.0068MF	10%	50V
C510	1-161-061-91	CERAMIC	0.068MF	10%	50V
C511	1-161-059-00	CERAMIC	0.047MF	10%	50V
C512	1-136-173-00	FILM	0.47MF	5%	50V
C513	1-136-167-00	FILM	0.15MF	5%	50V
C514	1-161-161-00	(US)....CERAMIC	0.047MF	10%	50V
C514	1-161-055-00	(UK,AEP,G-AEP,E)			
		...CAP, CERAMIC	0.022MF	10%	50V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C515	1-161-161-00	CERAMIC	0.047MF	10%	50V
C551	1-102-110-00	CERAMIC	220PF	10%	50V
C552	1-102-945-00	CERAMIC	8PF	1PF	50V
C553	1-123-306-00	ELECT	47MF	20%	10V
C554	1-123-307-00	ELECT	100MF	20%	10V
C555	1-123-306-00	ELECT	47MF	20%	10V
C556	1-124-183-00	ELECT	2.2MF	20%	50V
C557	1-102-947-00	CERAMIC	10PF	5%	50V
C558	1-124-186-00	ELECT	10MF	20%	50V
C559	1-102-127-21	CERAMIC	0.0068MF	10%	50V
C560	1-161-061-91	CERAMIC	0.068MF	10%	50V
C561	1-161-059-00	CERAMIC	0.047MF	10%	50V
C562	1-136-173-00	FILM	0.47MF	5%	50V
C563	1-136-167-00	FILM	0.15MF	5%	50V
C564	1-161-161-00	(US)....CERAMIC	0.047MF	10%	50V
C564	1-161-055-00	(UK,AEP,G-AEP,E)			
		....CAP, CERAMIC	0.022MF	10%	50V
C565	1-161-161-00	CERAMIC	0.047MF	10%	50V
C601	1-123-369-00	ELECT	4.7MF	20%	25V
C602	1-161-494-00	CERAMIC	0.022MF	30%	25V
C603	1-123-307-00	ELECT	100MF	20%	6.3V
C604	1-102-074-00	CERAMIC	0.001MF	10%	50V
C605	1-123-308-00	ELECT	220MF	20%	6.3V
C701	1-129-701-00	FILM	0.01MF	5%	100V
C702	1-129-701-00	FILM	0.01MF	5%	100V
C703	1-125-405-11	CAP, ELECT	12000MF		63V
C704	1-125-405-11	CAP, ELECT	12000MF		63V
C705	1-123-364-00	ELECT	1000MF	20%	50V
C706	1-123-364-00	ELECT	1000MF	20%	50V
C707	1-123-307-00	ELECT	100MF	20%	10V
C708	1-102-959-00	CERAMIC	22PF	5%	50V
C709	1-102-959-00	CERAMIC	22PF	5%	50V
C710	1-123-337-00	ELECT	1000MF	20%	25V
C711	1-123-337-00	ELECT	1000MF	20%	25V
C712	1-123-821-00	ELECT	47MF	20%	16V
C713	1-123-821-00	ELECT	47MF	20%	16V
C714	1-123-818-00	ELECT	22MF	20%	25V
C715	1-123-361-00	ELECT	220MF	20%	50V
C801	⚠.1-161-744-00	CERAMIC	0.01MF		400V
C802	⚠.1-161-744-00	(AEP,G-AEP,UK)...CERAMIC	0.01MF		400V
C901	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C902	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C903	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C904	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C905	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C906	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C907	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C908	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C921	1-161-279-00	(US,AEP,UK,E)...CERAMIC	10PF	5%	50V
C922	1-102-959-00	CERAMIC	22PF	5%	50V
C971	1-161-279-00	(US,AEP,UK,E)...CERAMIC	10PF	5%	50V
C972	1-102-959-00	CERAMIC	22PF	5%	50V
C911	1-161-323-00	(G-AEP)...CAP, CERAMIC	0.001MF	10%	50V
C921	1-161-267-00	(G-AEP)...CAP, CERAMIC	47PF	5%	50V
C923	1-161-330-00	(G-AEP)...CAP, CERAMIC	0.01MF	30%	25V
C931	1-129-794-00	(G-AEP)...CAP, PP FILM	0.0033MF	5%	100V
C932	1-161-330-00	(G-AEP)...CAP, CERAMIC	0.01MF	30%	25V
C941	1-161-383-00	(G-AEP)...CAP, CERAMIC	0.0047MF	10%	50V
C942	1-161-383-00	(G-AEP)...CAP, CERAMIC	0.0047MF	10%	50V
C943	1-161-285-00	(G-AEP)...CAP, CERAMIC	33PF	5%	50V
C951	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C952	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C953	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C954	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C955	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C956	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C957	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C958	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C961	1-161-323-00	(G-AEP)...CAP, CERAMIC	0.001MF	10%	50V
C971	1-161-267-00	(G-AEP)...CAP, CERAMIC	47PF	5%	50V
C973	1-161-330-00	(G-AEP)...CAP, CERAMIC	0.01MF	30%	25V
C991	1-161-383-00	(G-AEP)...CAP, CERAMIC	0.0047MF	10%	50V
C992	1-161-383-00	(G-AEP)...CAP, CERAMIC	0.0047MF	10%	50V
C993	1-161-285-00	(G-AEP)...CAP, CERAMIC	33PF	5%	50V
CN801	⚠.1-526-695-00	(E)...........OUTLET, AC			
CN801	⚠.1-526-751-00	(UK)..........OUTLET, AC			
CN801	⚠.1-526-794-11	(AEP,G-AEP)...OUTLET, AC			
CN801	⚠.1-526-883-00	(US)..........OUTLET, AC			
CN802	⚠.1-526-883-00	(US).....OUTLET, AC			
CNP1	*1-560-061-00	PIN, CONNECTOR 3P			
CNP2	*1-560-062-00	PIN, CONNECTOR 4P			
CNP3	*1-560-062-00	PIN, CONNECTOR 4P			
CNP4	*1-560-062-00	PIN, CONNECTOR 4P			
CNP5	*1-560-062-00	PIN, CONNECTOR 4P			
CNP6	*1-560-061-00	PIN, CONNECTOR 3P			
CNP7	*1-560-061-00	PIN, CONNECTOR 3P			
CNP8	*1-560-061-00	PIN, CONNECTOR 3P			
CNP9	*1-560-061-00	PIN, CONNECTOR 3P			
CNP10	*1-560-061-00	PIN, CONNECTOR 3P			
CNP11	*1-560-061-00	PIN, CONNECTOR 3P			
CNP12	*1-560-061-00	PIN, CONNECTOR 3P			
CNP13	*1-560-061-00	PIN, CONNECTOR 3P			
CNP14	*1-560-061-00	PIN, CONNECTOR 3P			
CNP15	*1-560-061-00	PIN, CONNECTOR 3P			
CNP16	*1-560-061-00	PIN, CONNECTOR 3P			
CNP17	*1-560-061-00	PIN, CONNECTOR 3P			
CNP18	*1-560-061-00	PIN, CONNECTOR 3P			
CNP19	*1-560-061-00	PIN, CONNECTOR 3P			
CNP20	*1-560-061-00	PIN, CONNECTOR 3P			
CNP21	*1-560-061-00	PIN, CONNECTOR 3P			
CNP22	*1-560-061-00	PIN, CONNECTOR 3P			
CNP23	*1-560-061-00	PIN, CONNECTOR 3P			
CNP24	*1-560-061-00	PIN, CONNECTOR 3P			
CNP25	*1-560-061-00	PIN, CONNECTOR 3P			
CNP26	*1-560-061-00	PIN, CONNECTOR 3P			
CNP28	*1-560-061-00	PIN, CONNECTOR 3P			
CNP30	*1-560-061-00	PIN, CONNECTOR 3P			
CNP31	*1-560-061-00	PIN, CONNECTOR 3P			
CNP32	*1-560-062-00	PIN, CONNECTOR 4P			
CNP33	*1-560-061-00	PIN, CONNECTOR 3P			
CNP34	*1-560-062-00	PIN, CONNECTOR 4P			
CNP35	*1-560-062-00	PIN, CONNECTOR 4P			
CNP36	*1-560-061-00	PIN, CONNECTOR 3P			

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ELECTRICAL PARTS

Ref.No.	Part No.	Description
CNP39	*1-560-061-00	PIN, CONNECTOR 3P
CNP40	*1-560-061-00	PIN, CONNECTOR 3P
CNP41	*1-560-061-00	PIN, CONNECTOR 3P
CNP51	*1-564-506-11	PLUG, CONNECTOR 3P
CNP52	*1-564-506-11	PLUG, CONNECTOR 3P
CNP53	*1-564-506-11	PLUG, CONNECTOR 3P
CNP54	*1-564-506-11	PLUG, CONNECTOR 3P
CNP55	*1-564-506-11	PLUG, CONNECTOR 3P
CNP56	*1-564-506-11	PLUG, CONNECTOR 3P
CNP57	*1-564-506-11	PLUG, CONNECTOR 3P
CNP58	*1-564-506-11	PLUG, CONNECTOR 3P
CNP59	*1-564-506-11	PLUG, CONNECTOR 3P
CNP60	*1-564-506-11	PLUG, CONNECTOR 3P
CNP61	*1-564-506-11	PLUG, CONNECTOR 3P
CNP62	*1-564-506-11	PLUG, CONNECTOR 3P
D201	8-719-100-42	DIODE RD6.8E-B3
D211	8-719-905-06	DIODE GL-5NG6
D212	8-719-905-06	DIODE GL-5NG6
D213	8-719-905-06	DIODE GL-5NG6
D214	8-719-905-06	DIODE GL-5NG6
D215	8-719-905-06	DIODE GL-5NG6
D216	8-719-905-06	DIODE GL-5NG6
D217	8-719-905-06	DIODE GL-5NG6
D218	8-719-900-21	DIODE GL-2HY1
D251	8-719-100-42	DIODE RD6.8E-B3
D501	8-719-100-57	DIODE RD10E-B2
D502	8-719-902-97	DIODE EQA01-06R2
D503	8-719-107-94	DIODE 1SS202-1
D504	8-719-107-94	DIODE 1SS202-1
D505	8-719-107-94	DIODE 1SS202-1
D506	8-719-107-94	DIODE 1SS202-1
D507	8-719-107-94	DIODE 1SS202-1
D551	8-719-100-57	DIODE RD10E-B2
D552	8-719-902-97	DIODE EQA01-06R2
D553	8-719-107-94	DIODE 1SS202-1
D554	8-719-107-94	DIODE 1SS202-1
D555	8-719-107-94	DIODE 1SS202-1
D556	8-719-107-94	DIODE 1SS202-1
D557	8-719-107-94	DIODE 1SS202-1
D601	8-719-200-02	DIODE 10E-2
D602	8-719-107-94	DIODE 1SS202-1
D603	8-719-905-06	DIODE GL-5NG6
D604	8-719-107-94	DIODE 1SS202-1
D605	8-719-107-94	DIODE 1SS202-1
D654	8-719-107-94	DIODE 1SS202-1
D655	8-719-107-94	DIODE 1SS202-1
D701	8-719-230-24	DIODE 30DL4
D702	8-719-230-24	DIODE 30DL4
D703	8-719-230-24	DIODE 30DL4
D704	8-719-230-24	DIODE 30DL4
D705	8-719-902-97	DIODE EQA01-06R2
D706	8-719-936-12	DIODE EQA01-12R
F801	⚠.1-532-272-XX	(US)...............FUSE 5.0A
F801	⚠.1-532-286-00	(AEP,G-AEP,UK,E)...FUSE 2.5A TIME-LAG
F802	⚠.1-532-286-00	(AEP,G-AEP,UK,E)...FUSE 2.5A TIME-LAG
IC201	8-759-923-90	IC BA4560
IC301	8-759-900-72	IC NE5532P
IC302	8-759-990-82	IC TL082CP

ELECTRICAL PARTS

Ref.No.	Part No.	Description
IC351	8-759-900-72	IC NE5532P
IC401	8-759-801-61	IC LA7220
IC601	8-759-101-23	IC UPC1237H
J101	1-507-910-11	JACK, PIN 4P
J102	1-507-914-21	JACK, PIN 6P
J103	1-507-914-21	JACK, PIN 6P
J104	1-507-914-21	JACK, PIN 6P
J105	1-562-916-11	JACK, PIN 2P
J106	1-562-916-11	JACK, PIN 2P
J501	1-507-669-00	JACK (HEADPHONE)
L501	*1-422-031-00	COIL, AIRCORE
L551	*1-422-031-00	COIL, AIRCORE
L901	1-413-101-00	(G-AEP)...COIL, INPUT 220UH
L902	1-413-101-00	(G-AEP)...COIL, INPUT 220UH
L951	1-413-101-00	(G-AEP)...COIL, INPUT 220UH
L952	1-413-101-00	(G-AEP)...COIL, INPUT 220UH
PT801	⚠.1-448-173-11	(US)..........TRANSFORMER, POWER
PT801	⚠.1-448-264-11	(UK)..........TRANSFORMER, POWER
PT801	⚠.1-448-265-11	(E)...........TRANSFORMER, POWER
PT801	⚠.1-448-266-11	(AEP,G-AEP)...TRANSFORMER, POWER
Q201	8-729-354-52	TRANSISTOR 2SC2545-E
Q202	8-729-354-52	TRANSISTOR 2SC2545-E
Q251	8-729-354-52	TRANSISTOR 2SC2545-E
Q252	8-729-354-52	TRANSISTOR 2SC2545-E
Q401	8-729-606-33	TRANSISTOR 2SC2603F
Q402	8-729-606-33	TRANSISTOR 2SC2603F
Q403	8-729-606-33	TRANSISTOR 2SC2603F
Q404	8-729-107-98	TRANSISTOR 2SC3622A-L
Q501	8-759-103-64	TRANSISTOR UPA68H-K
Q502	8-729-663-47	TRANSISTOR 2SC1364
Q503	8-729-663-47	TRANSISTOR 2SC1364
Q504	8-729-612-77	TRANSISTOR 2SA1027R
Q505	8-729-612-77	TRANSISTOR 2SA1027R
Q506	8-729-366-61	TRANSISTOR 2SD666-B
Q507	8-729-612-77	TRANSISTOR 2SA1027R
Q508	8-729-104-91	TRANSISTOR 2SA1383
Q509	8-729-104-18	TRANSISTOR 2SC3514
Q510	8-729-180-93	TRANSISTOR 2SD809
Q511	8-729-107-53	TRANSISTOR 2SC2275A
Q512	8-729-118-53	TRANSISTOR 2SA985P
Q513	8-729-301-82	(US)...............TRANSISTOR 2SC3519Y
Q513	8-729-302-83	(AEP,G-AEP,UK,E)...TRANSISTOR 2SC3284
Q514	8-729-301-86	(US)...............TRANSISTOR 2SA1386Y
Q514	8-729-302-80	(AEP,G-AEP,UK,E)...TRANSISTOR 2SA1303
Q551	8-759-103-64	TRANSISTOR UPA68H-K
Q552	8-729-663-47	TRANSISTOR 2SC1364
Q553	8-729-663-47	TRANSISTOR 2SC1364
Q554	8-729-612-77	TRANSISTOR 2SA1027R
Q555	8-729-612-77	TRANSISTOR 2SA1027R
Q556	8-729-366-61	TRANSISTOR 2SD666-B
Q557	8-729-612-77	TRANSISTOR 2SA1027R
Q558	8-729-104-91	TRANSISTOR 2SA1383
Q559	8-729-104-18	TRANSISTOR 2SC3514
Q560	8-729-180-93	TRANSISTOR 2SD809
Q561	8-729-107-53	TRANSISTOR 2SC2275A
Q562	8-729-118-53	TRANSISTOR 2SA985P

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

ELECTRICAL PARTS

Ref.No.	Part No.	Description
Q563	8-729-301-82	(US)...............TRANSISTOR 2SC3519Y
Q563	8-729-302-83	(AEP,G-AEP,UK,E)...TRANSISTOR 2SC3284
Q564	8-729-301-86	(US)...............TRANSISTOR 2SA1386Y
Q564	8-729-302-80	(AEP,G-AEP,UK,E)...TRANSISTOR 2SA1303
Q601	8-729-612-77	TRANSISTOR 2SA1027R
Q651	8-729-612-77	TRANSISTOR 2SA1027R
Q701	8-729-201-56	TRANSISTOR 2SK246-GR2
Q702	8-729-201-56	TRANSISTOR 2SK246-GR2
Q703	8-729-606-33	TRANSISTOR 2SC2603F
Q704	8-729-612-77	TRANSISTOR 2SA1027R
Q705	8-729-103-33	TRANSISTOR 2SD1310
Q706	8-729-377-12	TRANSISTOR 2SA771
Q707	8-729-606-33	TRANSISTOR 2SC2603F
Q708	8-729-612-77	TRANSISTOR 2SA1027R
Q709	8-729-180-93	TRANSISTOR 2SD809
R101	1-246-545-00	CARBON 1M 5% 1/4W
R102	1-246-545-00	CARBON 1M 5% 1/4W
R103	1-246-545-00	CARBON 1M 5% 1/4W
R104	1-247-713-11	CARBON 1K 5% 1/4W
R105	1-246-545-00	CARBON 1M 5% 1/4W
R106	1-246-545-00	CARBON 1M 5% 1/4W
R107	1-247-713-11	CARBON 1K 5% 1/4W
R108	1-246-545-00	CARBON 1M 5% 1/4W
R109	1-246-545-00	CARBON 1M 5% 1/4W
R110	1-247-713-11	CARBON 1K 5% 1/4W
R151	1-246-545-00	CARBON 1M 5% 1/4W
R152	1-246-545-00	CARBON 1M 5% 1/4W
R153	1-246-545-00	CARBON 1M 5% 1/4W
R154	1-247-713-11	CARBON 1K 5% 1/4W
R155	1-246-545-00	CARBON 1M 5% 1/4W
R156	1-246-545-00	CARBON 1M 5% 1/4W
R157	1-247-713-11	CARBON 1K 5% 1/4W
R158	1-246-545-00	CARBON 1M 5% 1/4W
R159	1-246-545-00	CARBON 1M 5% 1/4W
R160	1-247-713-11	(US,AEP,UK,E)...CARBON 1K 5% 1/4W
R201	1-247-119-00	(US,AEP,UK,E)...CARBON 330 5% 1/4W
R201	1-247-702-11	(G-AEP)...RES, CARBON 150 5% 1/4W
R202	1-247-700-11	CARBON 100 5% 1/4W
R203	1-249-469-11	CARBON 100K 5% 1/4W
R204	1-249-469-11	CARBON 100K 5% 1/4W
R205	1-247-713-11	CARBON 1K 5% 1/4W
R206	1-247-713-11	CARBON 1K 5% 1/4W
R207	1-247-700-11	CARBON 100 5% 1/4W
R208	1-247-725-11	CARBON 10K 5% 1/4W
R209	1-249-286-11	CARBON 1.5M 5% 1/3W
R210	1-214-771-00	METAL 56K 1% 1/4W
R211	1-214-745-00	METAL 4.7K 1% 1/4W
R212	1-214-705-00	METAL 100 1% 1/4W
R213	1-214-677-00	METAL 6.8 1% 1/4W
R214	1-247-704-11	CARBON 220 5% 1/4W
R215	1-249-469-11	CARBON 100K 5% 1/4W
R216	1-247-135-00	CARBON 1.5K 5% 1/4W
R251	1-247-119-00	(US,AEP,UK,E)...CARBON 330 5% 1/4W
R251	1-247-702-11	(G-AEP)...RES, CARBON 150 5% 1/4W

ELECTRICAL PARTS

Ref.No.	Part No.	Description
R252	1-247-700-11	CARBON 100 5% 1/4W
R253	1-249-469-11	CARBON 100K 5% 1/4W
R254	1-249-469-11	CARBON 100K 5% 1/4W
R255	1-247-713-11	CARBON 1K 5% 1/4W
R256	1-247-713-11	CARBON 1K 5% 1/4W
R257	1-247-700-11	CARBON 100 5% 1/4W
R258	1-247-725-11	CARBON 10K 5% 1/4W
R259	1-249-286-11	CARBON 1.5M 5% 1/3W
R260	1-214-771-00	METAL 56K 1% 1/4W
R261	1-214-745-00	METAL 4.7K 1% 1/4W
R262	1-214-705-00	METAL 100 1% 1/4W
R263	1-214-677-00	METAL 6.8 1% 1/4W
R264	1-247-704-11	CARBON 220 5% 1/4W
R265	1-249-469-11	CARBON 100K 5% 1/4W
R266	1-247-135-00	CARBON 1.5K 5% 1/4W
R301	1-249-469-11	CARBON 100K 5% 1/4W
R302	1-214-733-00	METAL 1.5K 1% 1/4W
R303	1-214-727-00	METAL 820 1% 1/4W
R304	1-214-727-00	METAL 820 1% 1/4W
R305	1-214-733-00	METAL 1.5K 1% 1/4W
R306	1-249-469-11	CARBON 100K 5% 1/4W
R307	1-249-469-11	CARBON 100K 5% 1/4W
R308	1-247-708-11	CARBON 470 5% 1/4W
R309	1-247-725-11	CARBON 10K 5% 1/4W
R310	1-247-119-00	CARBON 330 5% 1/4W
R330	1-247-708-11	CARBON 470 5% 1/4W
R351	1-249-469-11	CARBON 100K 5% 1/4W
R352	1-214-733-00	METAL 1.5K 1% 1/4W
R353	1-214-727-00	METAL 820 1% 1/4W
R354	1-214-727-00	METAL 820 1% 1/4W
R355	1-214-733-00	METAL 1.5K 1% 1/4W
R356	1-249-469-11	CARBON 100K 5% 1/4W
R357	1-249-469-11	CARBON 100K 5% 1/4W
R358	1-247-708-11	CARBON 470 5% 1/4W
R359	1-247-725-11	CARBON 10K 5% 1/4W
R360	1-247-119-00	CARBON 330 5% 1/4W
R380	1-247-708-11	CARBON 470 5% 1/4W
R401	1-247-702-11	CARBON 150 5% 1/4W
R402	1-247-702-11	CARBON 150 5% 1/4W
R403	1-247-725-11	CARBON 10K 5% 1/4W
R404	1-247-702-11	CARBON 150 5% 1/4W
R405	1-247-702-11	CARBON 150 5% 1/4W
R406	1-247-725-11	CARBON 10K 5% 1/4W
R407	1-247-696-11	CARBON 47 5% 1/4W
R408	1-247-125-00	CARBON 560 5% 1/4W
R409	1-247-696-11	CARBON 47 5% 1/4W
R410	1-247-125-00	CARBON 560 5% 1/4W
R411	1-247-167-00	CARBON 33K 5% 1/4W
R412	1-247-177-00	CARBON 82K 5% 1/4W
R413	1-247-129-00	CARBON 820 5% 1/4W
R414	1-247-143-00	CARBON 3.3K 5% 1/4W
R415	1-247-143-00	CARBON 3.3K 5% 1/4W
R416	1-247-149-00	CARBON 5.6K 5% 1/4W
R417	1-247-713-11	CARBON 1K 5% 1/4W
R418	1-249-469-11	CARBON 100K 5% 1/4W
R419	1-247-725-11	CARBON 10K 5% 1/4W
R420	1-247-163-00	CARBON 22K 5% 1/4W

ELECTRICAL PARTS

Ref.No.	Part No.	Description
R421	1-247-721-11	CARBON 4.7K 5% 1/4W
R501	1-247-700-11	CARBON 100 5% 1/4W
R502	1-246-545-00	CARBON 1M 5% 1/4W
R503 ⚠.	1-212-889-91	FUSIBLE 220 5% 1/4W F
R504 ⚠.	1-212-889-91	FUSIBLE 220 5% 1/4W F
R505	1-247-708-11	CARBON 470 5% 1/4W
R506	1-247-274-00	CARBON 27K 5% 1/2W
R507 ⚠.	1-247-131-00	CARBON 1K 5% 1/4W F
R508 ⚠.	1-212-883-00	FUSIBLE 120 5% 1/4W F
R509 ⚠.	1-213-160-11	METAL OXIDE 27K 5% 1W F
R510	1-247-721-11	CARBON 4.7K 5% 1/4W
R511 ⚠.	1-217-399-00	FUSIBLE 100 5% 1/4W F
R512	1-247-717-11	CARBON 2.2K 5% 1/4W
R513	1-247-125-00	CARBON 560 5% 1/4W
R514 ⚠.	1-217-391-00	FUSIBLE 22 5% 1/4W F
R515 ⚠.	1-217-391-00	FUSIBLE 22 5% 1/4W F
R516 ⚠.	1-212-984-00	FUSIBLE 120 5% 1/2W F
R517 ⚠.	1-217-430-00	FUSIBLE 4.7 5% 1/2W F
R518 ⚠.	1-217-430-00	FUSIBLE 4.7 5% 1/2W F
R519	1-217-657-11	RES, METAL PLATE 0.1
R520	1-217-657-11	RES, METAL PLATE 0.1
R521	1-244-945-00	CARBON 1M 5% 1/3W
R522	1-247-717-11	CARBON 2.2K 5% 1/4W
R523	1-247-167-00	CARBON 33K 5% 1/4W
R524	1-247-135-00	CARBON 1.5K 5% 1/4W
R525	1-247-145-00	CARBON 3.9K 5% 1/4W
R526	1-247-704-11	CARBON 220 5% 1/4W
R527	1-247-149-00	CARBON 5.6K 5% 1/4W
R528	1-247-127-00	CARBON 680 5% 1/4W
R529	1-247-153-00	CARBON 8.2K 5% 1/4W
R530	1-246-545-00	CARBON 1M 5% 1/4W
R531 ⚠.	1-217-434-00	FUSIBLE 10 5% 1/2W F
R532	1-247-192-00	CARBON 10 5% 1/2W
R533 ⚠.	1-206-656-00	METAL OXIDE 470 5% 2W F
R534 ⚠.	1-217-391-00	(US).....FUSIBLE 22 5% 1/4W F
R551	1-247-700-11	CARBON 100 5% 1/4W
R552	1-246-545-00	CARBON 1M 5% 1/4W
R553 ⚠.	1-212-889-91	FUSIBLE 220 5% 1/4W F
R554 ⚠.	1-212-889-91	FUSIBLE 220 5% 1/4W F
R555	1-247-708-11	CARBON 470 5% 1/4W
R556	1-247-274-00	CARBON 27K 5% 1/2W
R557 ⚠.	1-247-131-00	CARBON 1K 5% 1/4W F
R558 ⚠.	1-212-883-00	FUSIBLE 120 5% 1/4W F
R559 ⚠.	1-213-160-11	METAL OXIDE 27K 5% 1W F
R560	1-247-721-11	CARBON 4.7K 5% 1/4W
R561 ⚠.	1-217-399-00	FUSIBLE 100 5% 1/4W F
R562	1-247-717-11	CARBON 2.2K 5% 1/4W
R563	1-247-125-00	CARBON 560 5% 1/4W
R564 ⚠.	1-217-391-00	FUSIBLE 22 5% 1/4W F
R565 ⚠.	1-217-391-00	FUSIBLE 22 5% 1/4W F
R566 ⚠.	1-212-984-00	FUSIBLE 120 5% 1/2W F
R567 ⚠.	1-217-430-00	FUSIBLE 4.7 5% 1/2W F
R568 ⚠.	1-217-430-00	FUSIBLE 4.7 5% 1/2W F
R569	1-217-657-11	RES, METAL PLATE 0.1
R570	1-217-657-11	RES, METAL PLATE 0.1
R571	1-244-945-00	CARBON 1M 5% 1/3W
R572	1-247-717-11	CARBON 2.2K 5% 1/4W
R573	1-247-167-00	CARBON 33K 5% 1/4W
R574	1-247-135-00	CARBON 1.5K 5% 1/4W
R575	1-247-145-00	CARBON 3.9K 5% 1/4W
R576	1-247-704-11	CARBON 220 5% 1/4W
R577	1-247-149-00	CARBON 5.6K 5% 1/4W
R578	1-247-127-00	CARBON 680 5% 1/4W
R579	1-247-153-00	CARBON 8.2K 5% 1/4W
R580	1-246-545-00	CARBON 1M 5% 1/4W
R581 ⚠.	1-217-434-00	FUSIBLE 10 5% 1/2W F
R582	1-247-192-00	CARBON 10 5% 1/2W
R583 ⚠.	1-206-656-00	METAL OXIDE 470 5% 2W F
R584 ⚠.	1-217-391-00	(US)....FUSIBLE 22 5% 1/4W F
R601	1-247-270-00	CARBON 18K 5% 1/2W
R602	1-247-264-00	CARBON 10K 5% 1/2W
R603	1-247-175-00	CARBON 68K 5% 1/4W
R604	1-247-218-00	CARBON 120 5% 1/2W
R605	1-247-216-00	CARBON 100 5% 1/2W
R606	1-247-725-11	CARBON 10K 5% 1/4W
R607 ⚠.	1-247-141-00	CARBON 2.7K 5% 1/4W F
R608	1-247-163-00	CARBON 22K 5% 1/4W
R609	1-246-529-00	CARBON 220K 5% 1/4W
R610	1-246-533-00	CARBON 330K 5% 1/4W
R657 ⚠.	1-247-141-00	CARBON 2.7K 5% 1/4W F
R658	1-247-163-00	CARBON 22K 5% 1/4W
R660	1-246-533-00	CARBON 330K 5% 1/4W
R701 ⚠.	1-206-701-00	METAL OXIDE 100 5% 3W F
R702 ⚠.	1-206-652-11	METAL OXIDE 330 5% 2W F
R703	1-247-713-11	CARBON 1K 5% 1/4W
R704	1-247-713-11	CARBON 1K 5% 1/4W
R705	1-247-721-11	CARBON 4.7K 5% 1/4W
R706	1-214-751-00	METAL 8.2K 1% 1/4W
R707	1-214-748-00	METAL 6.2K 1% 1/4W
R708	1-214-757-00	METAL 15K 1% 1/4W
R709	1-214-757-00	METAL 15K 1% 1/4W
R710	1-246-527-00	CARBON 180K 5% 1/4W
R711	1-247-713-11	CARBON 1K 5% 1/4W
R712 ⚠.	1-206-717-00	METAL OXIDE 470 5% 3W F
R713 ⚠.	1-206-664-00	METAL OXIDE 1K 5% 2W F
R714 ⚠.	1-206-664-11	METAL OXIDE 1K 5% 2W F
R715	1-247-700-11	CARBON 100 5% 1/4W
R716	1-247-749-11	CARBON 560 5% 1/2W
R717	1-247-704-11	CARBON 220 5% 1/4W
R718	1-247-749-11	CARBON 560 5% 1/2W
R751 ⚠.	1-206-701-00	METAL OXIDE 100 5% 3W F
R901	1-247-119-00	(G-AEP)...RES, CARBON 330 5% 1/4W
R902	1-247-119-00	(G-AEP)...RES, CARBON 330 5% 1/4W
R903	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R904	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R905	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R906	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R907	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R908	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R909	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R941 ⚠.	1-217-434-00	(G-AEP)...RES, FUSE 10 5% 1/2W
R942 ⚠.	1-217-434-00	(G-AEP)...RES, FUSE 10 5% 1/2W
R943	1-247-704-11	(G-AEP)...RES, CARBON 220 5% 1/4W
R951	1-247-119-00	(G-AEP)...RES, CARBON 330 5% 1/4W

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

ELECTRICAL PARTS

Ref.No.	Part No.	Description
R952	1-247-119-00	(G-AEP)...RES, CARBON 330 5% 1/4W
R953	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R954	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R955	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R956	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R957	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R958	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R959	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R991 ⚠.	1-217-434-00	(G-AEP)...RES, FUSE 10 5% 1/2W
R992 ⚠.	1-217-434-00	(G-AEP)...RES, FUSE 10 5% 1/2W
R993	1-247-704-11	(G-AEP)...RES, CARBON 220 5% 1/4W
RT501	1-224-248-XX	RES, ADJ, SOLID 470
RT551	1-224-248-XX	RES, ADJ, SOLID 470
RV301	1-230-926-11	RES, VAR, CARBON 100K/100K (WITH RV351) (BALANCE)
RV302	1-230-657-11	RES, VAR, CARBON 10K/10K (WITH RV352) (ATTENUATOR)
RV501	1-230-925-11	RES, VAR, CARBON 37K/37K (WITH RV551) (TREBLE)
RV502	1-230-924-11	RES, VAR, CARBON 24K/24K (WITH RV552) (BASS)
RY501	1-515-356-00	RELAY
S201	1-570-365-11	SWITCH, ROTARY SLIDE (CARTRIDGE)
S301	1-570-075-11	SWITCH, PUSH (7 KEY)(FUNCTION)
S302	1-570-367-11	SWITCH, PUSH (2 KEY)(WITH S303)(EQ/SUB)
S501	1-570-079-11	SWITCH, PUSH (2 KEY)(WITH S502) (TONE/BASS)
S503	1-570-366-11	SWITCH, ROTARY SLIDE (SPEAKER)
S801 ⚠.	1-552-246-00	(US)...............SWITCH, PUSH (POWER)
S801 ⚠.	1-554-880-11	(AEP,G-AEP,UK,E)...SWITCH, PUSH (POWER)
TM901	1-536-767-00	TERMINAL BOARD, SPEAKER
TM902	1-536-767-00	TERMINAL BOARD, SPEAKER
VS801⚠.	1-526-576-31	(E)...SELECTOR, POWER VOLTAGE

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

ACCESSORY & PACKING MATERIAL

Part No.	Description
2-297-403-00	SHEET (LARGE), PROTECTION
3-701-630-00	BAG, POLYETHYLENE
3-760-648-11	MANUAL, INSTRUCTION
4-885-949-01	CUSHION (FRONT), UPPER
4-885-950-01	CUSHION (REAR), UPPER
4-885-951-01	CUSHION (FRONT), LOWER
4-885-952-01	CUSHION (REAR), LOWER
4-908-833-01	INDIVIDUAL CARTON

1 2 3 4 5 6

A B C D E F G H

SONY®

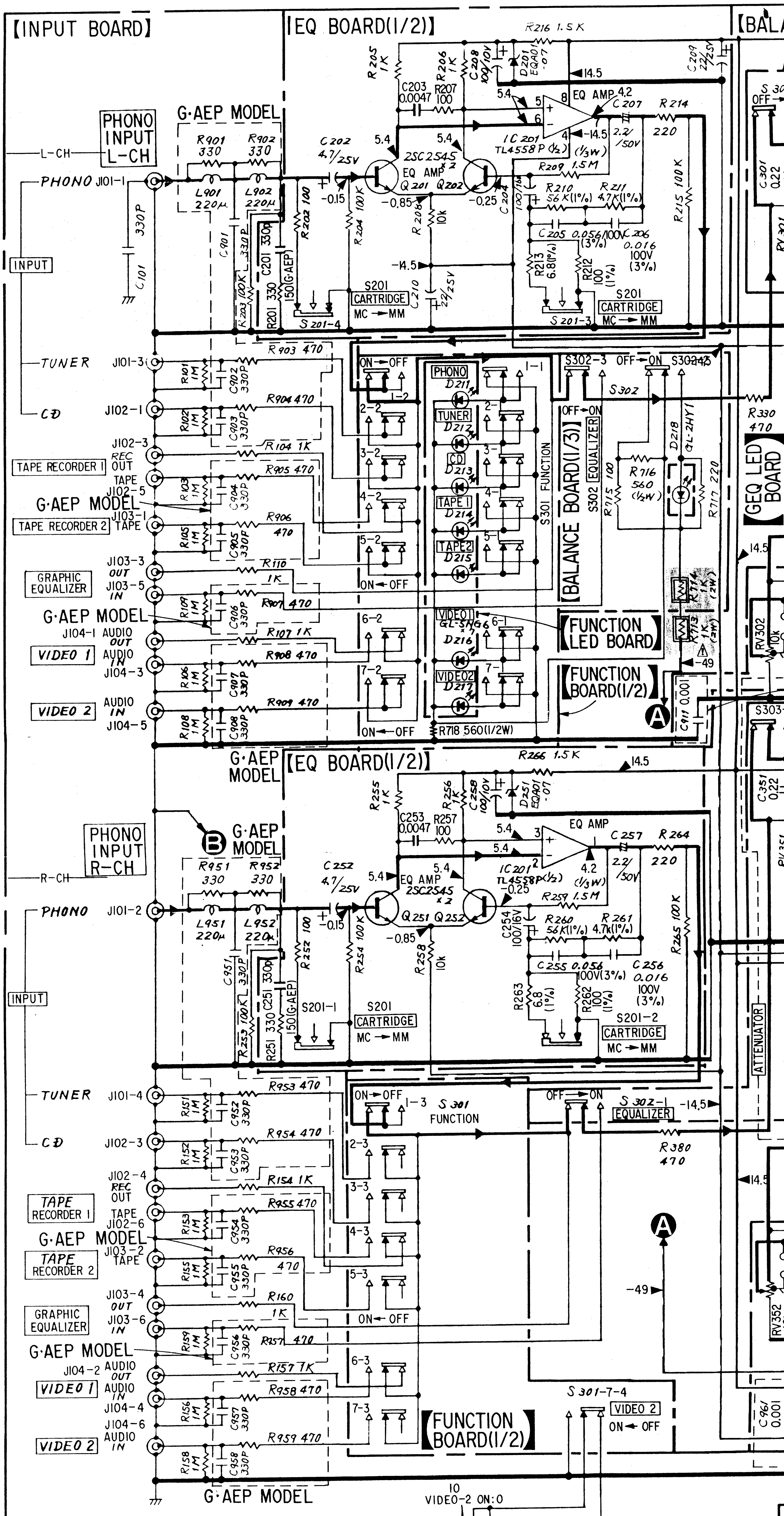
INTEGRATED STEREO AMPLIFIER

TA-F222ES (US, AEP, UK, E model)

SCHEMATIC DIAGRAM

PRELIMINARY

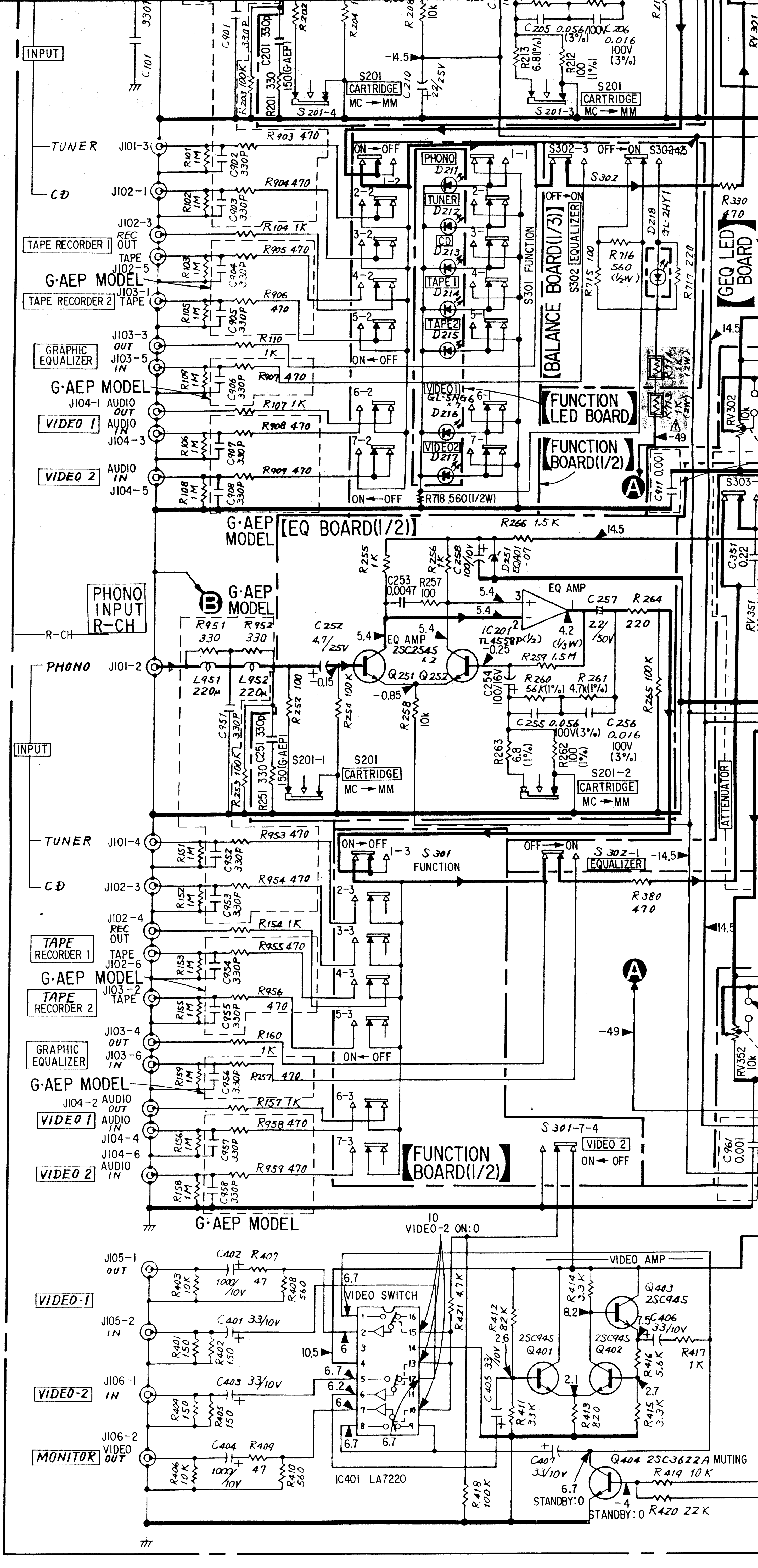
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.



【INPUT BOARD】
【EQ BOARD(1/2)】
【BALA
PHONO INPUT L-CH
L-CH
PHONO J101-1
G·AEP MODEL
R901 330
R902 330
L901 220μ
L902 220μ
C101 330P
C901 330P
C201 330
150(G·AEP)
R203 100K
R201 330
R202 100
INPUT
C202 4.7/25V
2SC2545 ×2
EQ AMP
Q201 Q202
R204 100K
R208 10k
R205 1K
R206 1K
C208 100/10V
D201 EQA01-07
C203 0.0047
R207 100
R216 1.5K
IC201 TL4558P (½)
EQ AMP
C207 2.2/50V (⅓W)
R214 220
R209 1.5M
R210 56K(1%)
R211 4.7K(1%)
R215 100K
C204 100/16
C205 0.056/100V (3%)
C206 0.016 100V (3%)
R213 6.8(1%)
R212 100 (1%)
C210 22/25V
S201 CARTRIDGE MC → MM
S201-4
S201-3
14.5
-14.5
5.4
-0.15
-0.85
-0.25
4.2
TUNER J101-3
CD J102-1
R101 1M
C902 330P
R903 470
R102 1M
C903 330P
R904 470
J102-3 REC OUT
TAPE RECORDER 1
R104 1K
TAPE J102-5
R103 1M
C904 330P
R905 470
G·AEP MODEL
J103-1 TAPE
TAPE RECORDER 2
R105 1M
C905 330P
R906 470
GRAPHIC EQUALIZER
J103-3 OUT
J103-5 IN
R110 1K
R109 1M
C906 330P
R907 470
J104-1 AUDIO OUT
VIDEO 1
AUDIO IN
J104-3
R107 1K
R106 1M
C907 330P
R908 470
VIDEO 2
AUDIO IN
J104-5
R108 1M
C908 330P
R909 470
ON → OFF
1-1 1-2 2-2 3-2 4-2 5-2 6-2 7-2
PHONO D211
TUNER D212
CD D213
TAPE1 D214
TAPE2 D215
VIDEO1 GL-5HG6 ×7 D216
VIDEO2 D217
6-1 7-1 2- 3- 4- 5-
S301 FUNCTION
【BALANCE BOARD(1/3)】
S302 EQUALIZER
S302-3 OFF → ON S302
OFF → ON
R715 100
R716 560 (½W)
D218 GL-2HY1
R717 220
R330 470
【GEQ LED BOARD】
【FUNCTION LED BOARD】
【FUNCTION BOARD(1/2)】
R714 1K (2W)
R713 1K (2W)
R718 560(1/2W)
C911 0.001
RV302 10k
C301 0.22
S303
-49
Ⓐ
Ⓑ
G·AEP MODEL
PHONO INPUT R-CH
R-CH
PHONO J101-2
R951 330
R952 330
L951 220μ
L952 220μ
C951 330P
C251 330
150(G·AEP)
R253 100K
R251 330
R252 100
C252 4.7/25V
EQ AMP 2SC2545 ×2
Q251 Q252
R254 100K
R258 10k
R255 1K
R256 1K
C258 100/10V
D251 EQA01-07
C253 0.0047
R257 100
R266 1.5K
IC201 TL4558P(½)
EQ AMP
C257 2.2/50V (⅓W)
R264 220
R259 1.5M
R260 56K(1%)
R261 4.7k(1%)
R265 100K
C254 100/16V
C255 0.056 100V(3%)
C256 0.016 100V (3%)
R263 6.8 (1%)
R262 100 (1%)
S201-1
S201 CARTRIDGE MC → MM
S201-2 CARTRIDGE MC → MM
C351 0.22
TUNER J101-4
CD J102-3
R151 1M
C952 330P
R953 470
R152 1M
C953 330P
R954 470
J102-4 REC OUT
TAPE RECORDER 1
R154 1K
TAPE J102-6
R153 1M
C954 330P
R955 470
J103-2 TAPE
TAPE RECORDER 2
R155 1M
C955 330P
R956 470
GRAPHIC EQUALIZER
J103-4 OUT
J103-6 IN
R160 1K
R159 1M
C956 330P
R957 470
J104-2 AUDIO OUT
VIDEO 1
AUDIO IN
J104-4
R157 1K
R156 1M
C957 330P
R958 470
J104-6 AUDIO IN
VIDEO 2
R158 1M
C958 330P
R959 470
ON → OFF
1-3 2-3 3-3 4-3 5-3 6-3 7-3
S301 FUNCTION
S302-1 EQUALIZER
-14.5
R380 470
ATTENUATOR
RV352
S301-7-4
VIDEO 2 ON ← OFF
C961 0.001
【FUNCTION BOARD(1/2)】
10 VIDEO-2 ON:0
G·AEP MODEL

Note:

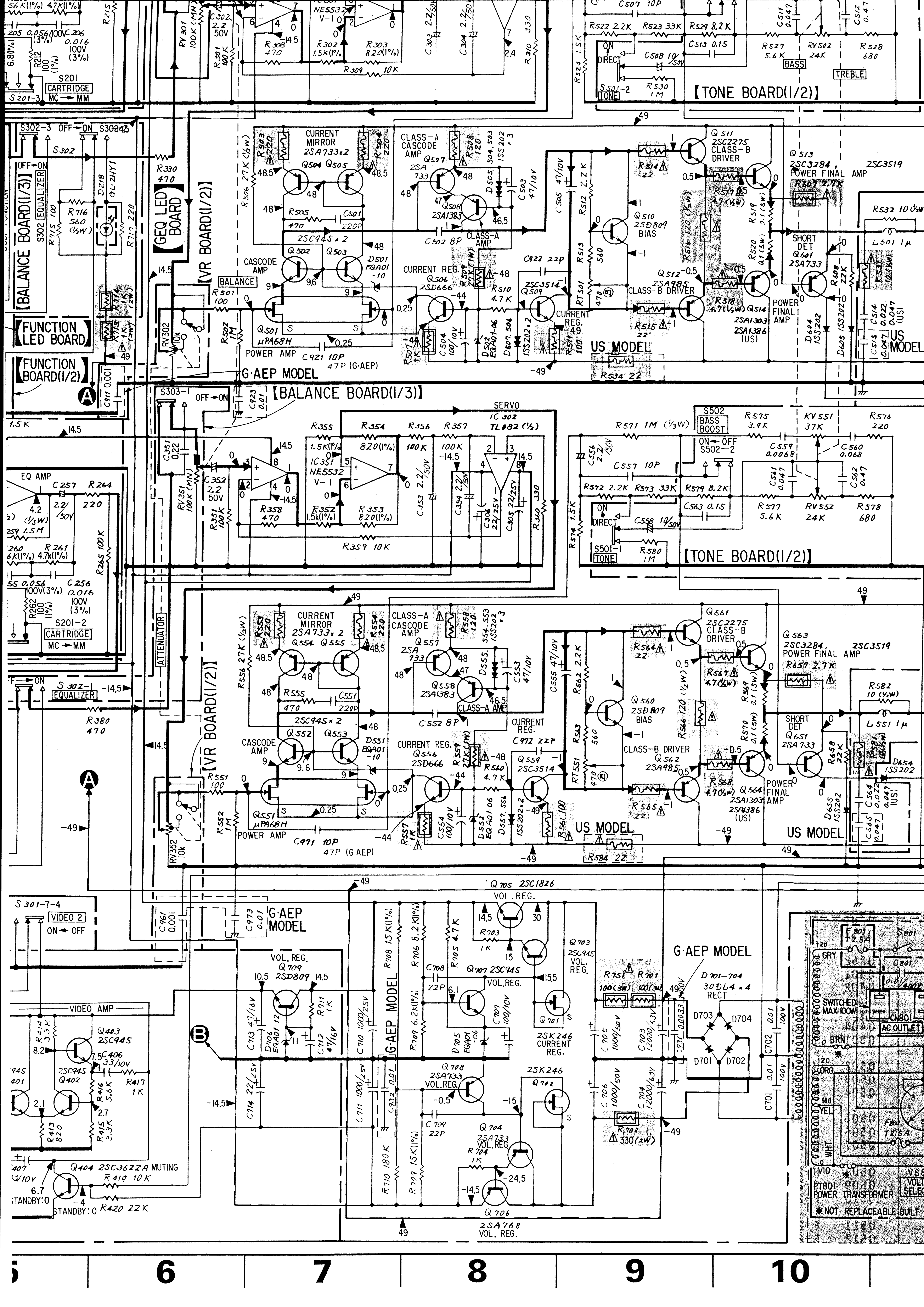
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- ➡ : signal path.
- ▭ : nonflammable resistor.
- ▭ : fusible resistor.
- ▬ : B+ bus.

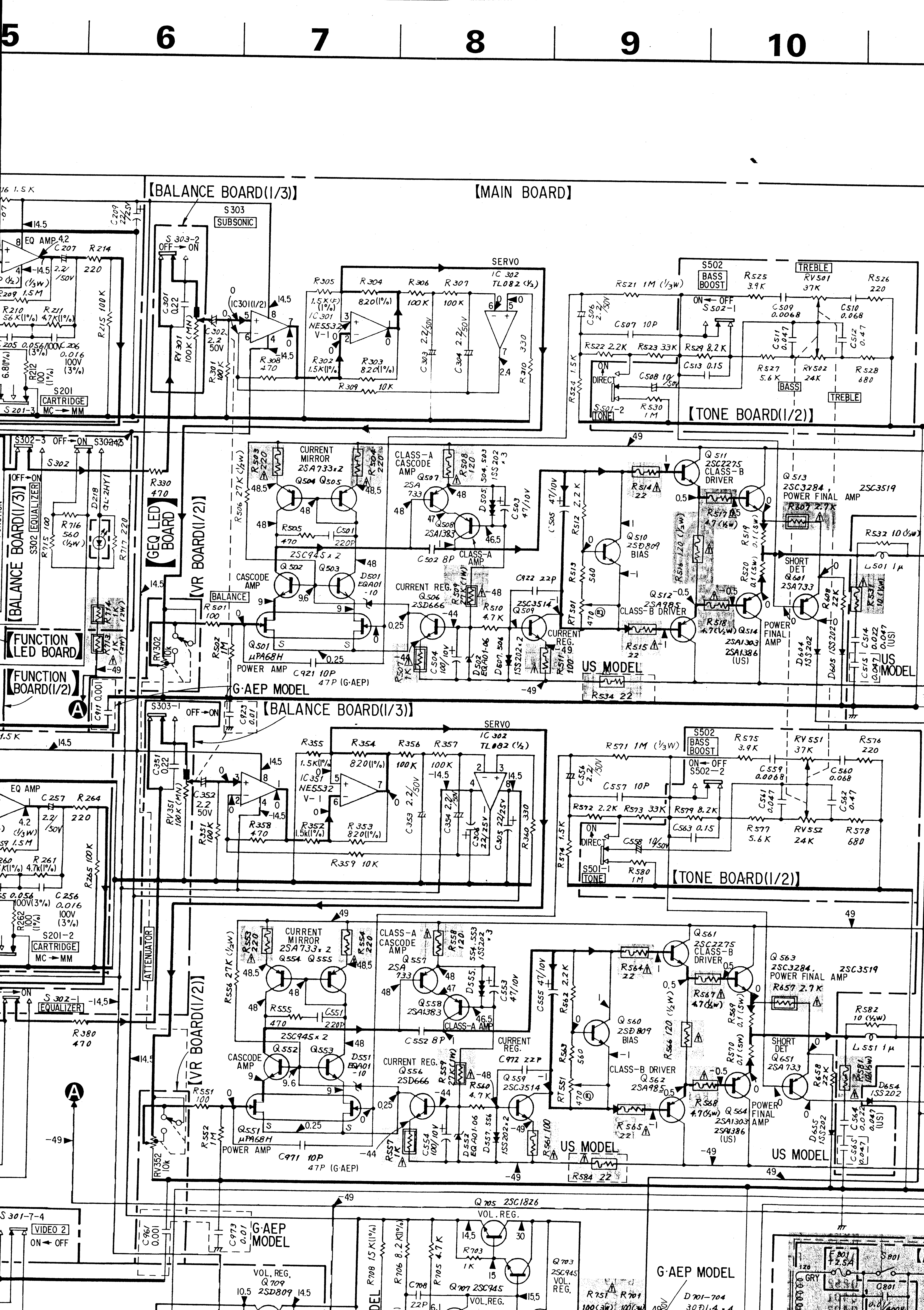

C
D
E
F
G
H
I
J
1
2
3
4
5
6
INPUT
TUNER
CD
TAPE RECORDER 1
REC OUT
TAPE
G·AEP MODEL
TAPE RECORDER 2
GRAPHIC EQUALIZER
OUT
IN
VIDEO 1
AUDIO OUT
AUDIO IN
VIDEO 2
S201 CARTRIDGE MC → MM
S201-4
S201-3
ON → OFF
ON ← OFF
PHONO
TUNER
CD
TAPE 1
TAPE2
VIDEO1
VIDEO2
D211
D212
D213
D214
D215
D216
D217
GL-5NG6
S301 FUNCTION
BALANCE BOARD(1/3)
S302 EQUALIZER
S302-3 OFF → ON
GEQ LED BOARD
FUNCTION LED BOARD
FUNCTION BOARD(1/2)
R718 560(1/2W)
RV302 10k
S303
C351 0.22
RV351
EQ BOARD(1/2)
PHONO INPUT R-CH
R-CH
G·AEP MODEL
EQ AMP
2SC2545 ×2
Q251 Q252
IC201 TL4558P(1/2)
R951 330
R952 330
L951 220μ
L952 220μ
C252 4.7/25V
S201-1
S201-2
CARTRIDGE MC → MM
ATTENUATOR
S301 FUNCTION
S302-1 EQUALIZER
R380 470
RV352 10k
S301-7-4
VIDEO 2 ON ← OFF
FUNCTION BOARD(1/2)
G·AEP MODEL
VIDEO-2 ON:0
VIDEO AMP
VIDEO-1
OUT
IN
VIDEO-2
MONITOR VIDEO OUT
VIDEO SWITCH
IC401 LA7220
Q401 2SC945
Q402 2SC945
Q403 2SC945
Q404 2SC3622A MUTING
STANDBY:0
R419 10K
R420 22K
R417 1K
C961 0.001
C911 0.001
A
B

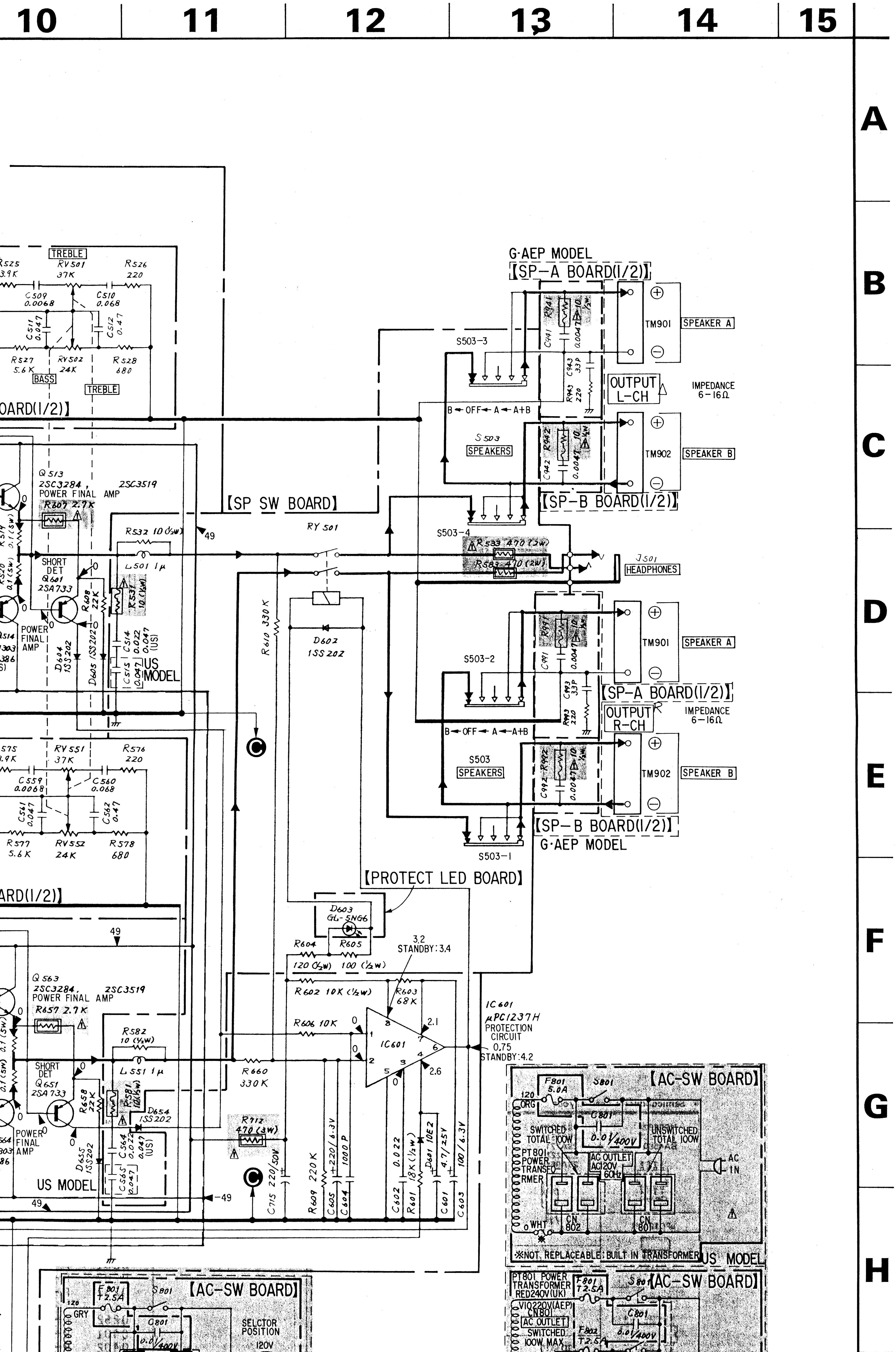
Note:

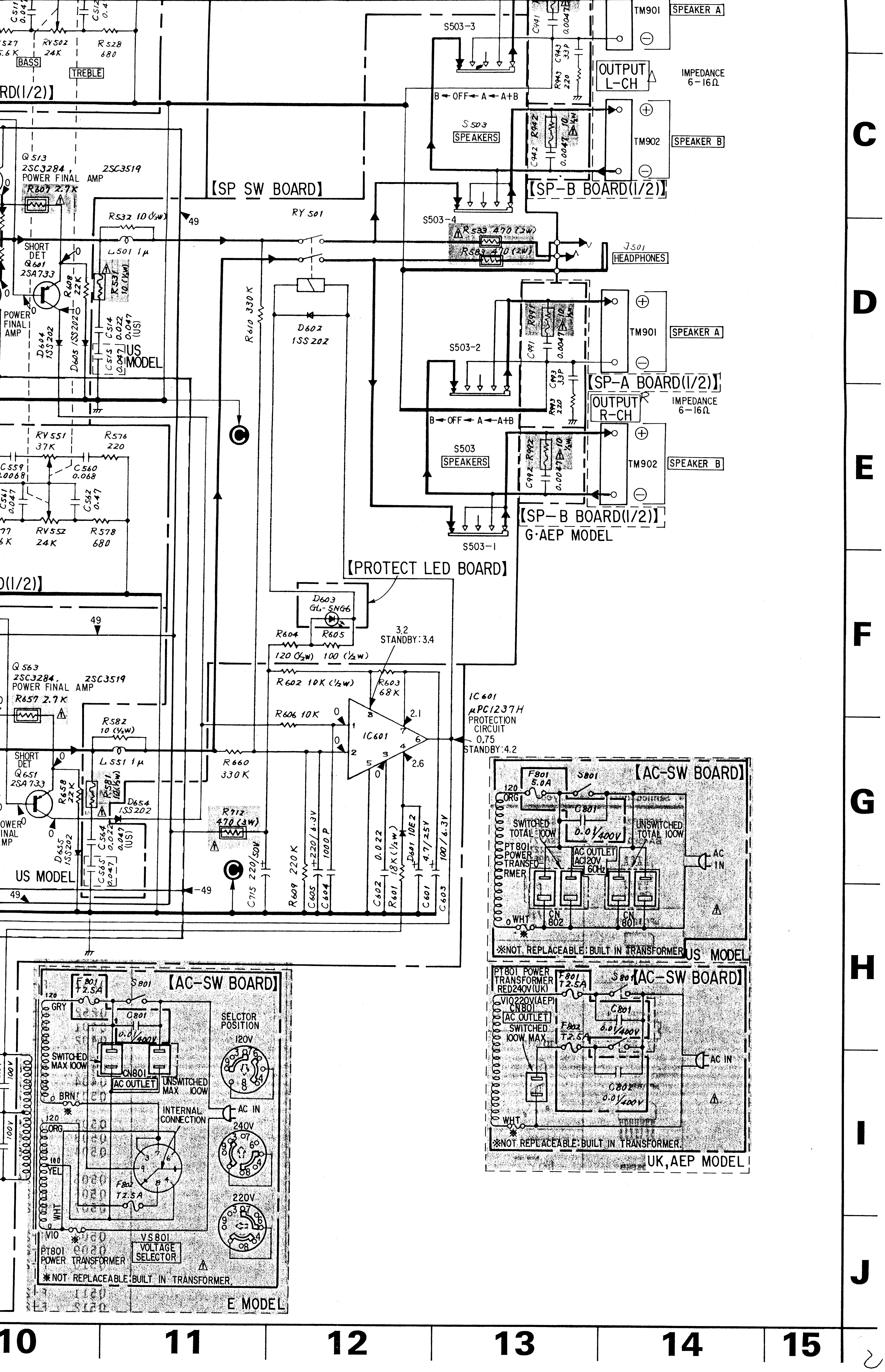
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ➡ : signal path.
- ▭ : nonflammable resistor.
- ▭ : fusible resistor.
- ——— : B+ bus.
- – – – : B- bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal conditions with a VOM (50 kΩ/V).
- Voltage variations may be noted due to normal production tolerances.

1


S201 CARTRIDGE MC → MM
【TONE BOARD(1/2)】
S501-2 TONE
ON DIRECT
BASS
TREBLE
RV502 24K
CURRENT MIRROR 2SA733×2
CLASS-A CASCODE AMP
Q511 2SC2275 CLASS-B DRIVER
Q513 2SC3284, POWER FINAL AMP 2SC3519
S302-3 OFF→ON S302-3
S302
EQUALIZER
【BALANCE BOARD(1/3)】
【GEQ LED BOARD】
【VR BOARD(1/2)】
BALANCE
CASCODE AMP
Q502 Q503 2SC945×2
D501 EQA01-10
CURRENT REG. Q506 2SD666
Q510 2SD809 BIAS
Q512 2SA985 CLASS-B DRIVER
Q514 2SA1303 2SA1386 (US)
POWER FINAL AMP
SHORT DET Q601 2SA733
US MODEL
Q501 μPA68H POWER AMP
C921 10P 47P (G·AEP)
G·AEP MODEL
【FUNCTION LED BOARD】
【FUNCTION BOARD(1/2)】
S303-1 OFF→ON
SERVO IC302 TL082 (1/2)
IC351 NE5532 V-1
RV351 100K (MN)
S502 BASS BOOST ON→OFF S502-2
RV551 37K
RV552 24K
S501-1 TONE
EQ AMP
S201-2 CARTRIDGE MC→MM
ATTENUATOR
S302-1 EQUALIZER
R380 470
Q561 2SC2275 CLASS-B DRIVER
Q563 2SC3284, POWER FINAL AMP 2SC3519
Q560 2SD809 BIAS
Q562 2SA985 CLASS-B DRIVER
Q564 2SA1303 2SA1386 (US)
Q558 2SA1383 CLASS-A AMP
Q556 2SD666 CURRENT REG.
Q551 μPA68H POWER AMP
C971 10P 47P (G·AEP)
SHORT DET Q651 2SA733
RV352 10k
S301-7-4 VIDEO 2 ON ← OFF
C961 0.001
C973 0.01
Q705 2SC1826 VOL. REG.
Q703 2SC945 VOL. REG.
Q707 2SC945 VOL. REG.
Q709 2SD809 VOL. REG.
Q701 2SK246 CURRENT REG.
G·AEP MODEL
D701–704 30DL4×4 RECT
R751 100(3W) R701 100(3W)
R702 330(2W)
Q708 2SA733 VOL. REG.
Q702 2SK246
Q704 2SA733 VOL. REG.
Q706 2SA768 VOL. REG.
VIDEO AMP
Q403 2SC945
Q402 2SC945
Q404 2SC3622A MUTING
STANDBY: 0
F801 T2.5A
S801
GRY
C801 0.01/400V
SWITCHED MAX 100W
CN801 AC OUTLET
BRN
ORG
YEL
WHT
F802 T2.5A
PT801 POWER TRANSFORMER
✱NOT REPLACEABLE: BUILT
VOLT SELEC
A
B
49
-49
14.5
-14.5
5
6
7
8
9
10


5
6
7
8
9
10
【BALANCE BOARD(1/3)】
【MAIN BOARD】
S303 SUBSONIC
S303-2 OFF → ON
SERVO
IC 302 TL082 (1/2)
IC301(1/2)
IC 301 NE5532 V-1
R305 1.5K(F)(1%)
R304 820(1%)
R306 100K
R307 100K
R302 1.5K(1%)
R303 820(1%)
R308 470
R309 10K
R310 330
C301 0.22
RV301 100K(MN)
C302 2.2 50V
R301 100K
C303 2.2/50V
C304 2.2/50V
S502 BASS BOOST
TREBLE
R521 1M (1/3W)
R525 3.9K
RV501 37K
R526 220
S502-1 ON ← OFF
C509 0.0068
C510 0.068
C506 2.2/50V
C507 10P
R522 2.2K
R523 33K
R529 8.2K
C511 0.047
C512 0.47
C513 0.15
R527 5.6K
RV502 24K
R528 680
BASS
TREBLE
R524 1.5K
ON DIRECT
C508 10/50V
S501-2 TONE
R530 1M
【TONE BOARD(1/2)】
EQ AMP
C207 2.2/50V
R214 220
R209 1.5M
R210 56K(1%)
R211 4.7K(1%)
R215 100K
C205 0.056/100V (3%)
C206 0.016 100V (3%)
R212 100 (1%)
S201 CARTRIDGE MC → MM
S201-3
C209 22/25V
S302-3 OFF → ON
S302
R330 470
D218 GL-2HY1
R716 560 (1/2W)
R715 100
R717 220
EQUALIZER
【BALANCE BOARD(1/3)】
【GEQ LED BOARD】
【VR BOARD(1/2)】
【FUNCTION LED BOARD】
【FUNCTION BOARD(1/2)】
R714 1K (2W)
R713 1K (2W)
C911 0.001
A
G·AEP MODEL
BALANCE
RV302 10K
R501 100
R502 1M
R503 220
R504 220
R506 27K (1/2W)
CURRENT MIRROR
2SA733×2
Q504 Q505
R505 470
C501 220P
2SC945×2
Q502 Q503
CASCODE AMP
D501 EQA01-10
Q501 μPA68H
POWER AMP
C921 10P 47P (G·AEP)
CLASS-A CASCODE AMP
Q507 2SA733
R508 120
D505 504,503 1SS202×3
Q508 2SA1383
C503 47/10V
C502 8P
CLASS-A AMP
CURRENT REG.
Q506 2SD666
R509 27K(1W)
R510 4.7K
R507 1K
C504 100/10V
D502 EQA01-06
D607, 506 1SS202×2
C922 22P
Q509 2SC3514
CURRENT REG.
R511 100
C505 47/10V
R512 2.2K
R513 560
RT501 470
Q510 2SD809 BIAS
Q511 2SC2275 CLASS-B DRIVER
R514 22
R517 4.7(1/2W)
R516 120 (1/2W)
Q512 2SA985 CLASS-B DRIVER
R518 4.7(1/2W)
R515 22
Q514 2SA1303 2SA1386 (US)
POWER FINAL AMP
Q513 2SC3284, 2SC3519 POWER FINAL AMP
R807 2.7K
R519 0.1 (5W)
R520 0.1 (5W)
SHORT DET Q601 2SA733
R608 22K
R532 10 (5W)
L501 1μ
R531 10(1W)
D604 1SS202
D605 1SS202
C514 0.022
C515 0.047
US MODEL
R534 22
S303-1 OFF → ON
C923 0.01
IC 302 TL082 (1/2)
IC 351 NE5532 V-1
R355 1.5K(1%)
R354 820(1%)
R356 100K
R357 100K
R352 1.5k(1%)
R353 820(1%)
R358 470
R359 10K
R360 330
C351 0.22
RV351 100K(MN)
C352 2.2 50V
R351 100K
C353 2.2/50V
C354 2.2/50V
C306 22/25V
C305 22/25V
R571 1M (1/3W)
R575 3.9K
RV551 37K
R576 220
S502-2 ON ← OFF
C559 0.0068
C560 0.068
C556 2.2/50V
C557 10P
R572 2.2K
R573 33K
R579 8.2K
C561 0.047
C562 0.47
C563 0.15
R577 5.6K
RV552 24K
R578 680
R574 1.5K
C558 10/50V
S501-1 TONE
R580 1M
EQ AMP
C257 2.2/50V
R264 220
R259 1.5M
R260 56K(1%)
R261 4.7k(1%)
R265 100K
C255 0.056 100V(3%)
C256 0.016 100V (3%)
R262 100 (1%)
S201-2 CARTRIDGE MC → MM
ATTENUATOR
S302-1 EQUALIZER
R380 470
R553 220
R554 220
R556 27K (1/2W)
Q554 Q555
R555 470
C551 220P
Q552 Q553
D551 EQA01-10
Q551 μPA68H
C971 10P 47P (G·AEP)
Q557 2SA733
R558 120
D555 554,553 1SS202×3
Q558 2SA1383
C553 47/10V
C552 8P
Q556 2SD666
R559 27K(1W)
R560 4.7K
C972 22P
Q559 2SC3514
R557 1K
C554 100/10V
D552 EQA01-06
D557, 556 1SS202×2
R561 100
R551 100
R552 1M
RV352 10k
C555 47/10V
R562 2.2K
R563 560
RT551 470
Q560 2SD809 BIAS
Q561 2SC2275 CLASS-B DRIVER
R564 22
R567 4.7(1/2W)
R566 120 (1/2W)
Q562 2SA985
R568 4.7(1/2W)
R565 22
Q564 2SA1303 2SA1386 (US)
Q563 2SC3284, 2SC3519 POWER FINAL AMP
R657 2.7K
R569 0.1 (5W)
R570 0.1 (5W)
Q651 2SA733
R658 22K
R582 10 (1/2W)
L551 1μ
R581 10(1W)
D654 1SS202
D655 1SS202
C564 0.022
C565 0.047
R584 22
S301-7-4 VIDEO 2 ON ← OFF
C961 0.001
C973 0.01
Q705 2SC1826 VOL. REG.
R708 15K(1%)
R706 8.2K(1%)
R705 4.7K
R703 1K
Q703 2SC945 VOL. REG.
Q707 2SC945 VOL. REG.
Q709 2SD809 VOL. REG.
C708 22P
R751 100(3W)
R701 100(3W)
D701-704 30D1.4×4
F801 T2.5A
S801
Q801
GRY
48.5
48
9.6
0.25
-44
-48
-49
14.5
-14.5
49
0.5
-0.5
4.2
2.4


10
11
12
13
14
15
A
B
C
D
E
F
G
H
TREBLE
RV501 37K
R526 220
C509 0.0068
C510 0.068
C511 0.047
C512 0.47
R527 5.6K
RV502 24K
R528 680
BASS
TREBLE
OARD(1/2)
Q513 2SC3284, 2SC3519
POWER FINAL AMP
R207 2.7K
SP SW BOARD
R532 10 (1/2W)
49
RY501
SHORT DET Q601 2SA733
L501 1μ
R608 22K
R537 10(1/2W)
POWER FINAL AMP
D604 1SS202
D605 1SS202
C514 0.022
0.047 (US)
C515 0.047
US MODEL
R610 330K
D602 1SS202
G·AEP MODEL
SP-A BOARD(1/2)
R941
C941 0.0047
10 1/2W
S503-3
C943 33P
R943 220
TM901
SPEAKER A
OUTPUT L-CH
IMPEDANCE 6−16Ω
B ← OFF ← A ← A+B
S503 SPEAKERS
R942
C942 0.0047
TM902
SPEAKER B
SP-B BOARD(1/2)
S503-4
R533 470 (3W)
R583 470 (2W)
J501 HEADPHONES
R991
C991 0.0047
S503-2
C993 33P
R993 220
TM901
SPEAKER A
SP-A BOARD(1/2)
OUTPUT R-CH
IMPEDANCE 6−16Ω
B ← OFF ← A ← A+B
S503 SPEAKERS
R992
C992 0.0047
TM902
SPEAKER B
SP-B BOARD(1/2)
G·AEP MODEL
S503-1
C
R575 3.9K
RV551 37K
R576 220
C559 0.0068
C560 0.068
C561 0.047
C562 0.47
R577 5.6K
RV552 24K
R578 680
ARD(1/2)
PROTECT LED BOARD
D603 GL-5NG6
R604 120 (1/2W)
R605 100 (1/2W)
3.2 STANDBY:3.4
R602 10K (1/2W)
R603 68K
R606 10K
IC601
2.1
0.75 STANDBY:4.2
2.6
IC601 μPC1237H PROTECTION CIRCUIT
49
Q563 2SC3284, 2SC3519
POWER FINAL AMP
R657 2.7K
R582 10 (1/2W)
L551 1μ
SHORT DET Q651 2SA733
R658 22K
R581 10(1/2W)
D654 1SS202
R660 330K
R712 470 (3W)
POWER FINAL AMP
D655 1SS202
C564 0.022 0.047 (US)
C565 0.047
US MODEL
49
C715 220/50V
R609 220K
C605 220/6.3V
C604 1000P
C602 0.022
R601 18K (1/2W)
D601 10E2
C601 4.7/25V
C603 100/6.3V
AC-SW BOARD
F801 5.0A
S801
120 ORG
C801 0.01/400V
SWITCHED TOTAL 100W
UNSWITCHED TOTAL 100W
AC OUTLET AC120V 60Hz
PT801 POWER TRANSFORMER
CN802
CN801
AC IN
WHT
※NOT REPLACEABLE: BUILT IN TRANSFORMER
US MODEL
AC-SW BOARD
F801 T2.5A
S801
120 GRY
C801 0.01/400V
SELCTOR POSITION 120V
PT801 POWER TRANSFORMER RED240V(UK)
VIO220V(AEP)
CN801
AC OUTLET
SWITCHED 100W MAX
F802 T2.5A
S801
AC-SW BOARD
C801 0.01/400V


BASS
TREBLE
RV502 24K
R528 680
[SP SW BOARD]
Q513 2SC3284, 2SC3519 POWER FINAL AMP
R607 2.7K
R532 10 (1/2W)
L501 1μ
R531 10 (1kW)
SHORT DET Q601 2SA733
R608 22K
D604 1SS202
D605 1SS202
C514 0.022
C515 0.047
US MODEL
RY501
R610 330K
D602 1SS202
S503-3
B ← OFF ← A ← A+B
S503 SPEAKERS
TM901 SPEAKER A
TM902 SPEAKER B
OUTPUT L-CH
IMPEDANCE 6−16Ω
C941 0.0047
C943 33P
R943 220
R942 10 1kW
C942 0.0047
[SP-B BOARD(1/2)]
S503-4
R533 470 (3W)
R583 470 (2W)
J501 HEADPHONES
S503-2
R991
C991 0.0047
C993 33P
R993 220
[SP-A BOARD(1/2)]
OUTPUT R-CH
IMPEDANCE 6−16Ω
R992
C992 0.0047
S503-1
[SP−B BOARD(1/2)]
G·AEP MODEL
RV551 37K
R576 220
C559 0.0068
C560 0.068
C561 0.047
C562 0.47
RV552 24K
R578 680
[PROTECT LED BOARD]
D603 GL-5NG6
R604 120 (1/2W)
R605 100 (1/2W)
3.2 STANDBY: 3.4
R602 10K (1/2W)
R603 68K
R606 10K
IC601
IC601 μPC1237H PROTECTION CIRCUIT
0.75 STANDBY: 4.2
2.1
2.6
Q563 2SC3284, 2SC3519 POWER FINAL AMP
R657 2.7K
R582 10 (1/2W)
L551 1μ
SHORT DET Q651 2SA733
R658 22K
R581 10 (1kW)
D654 1SS202
D655 1SS202
C564 0.022
C565 0.047
R660 330K
R712 470 (3W)
C715 220/50V
R609 220K
C605 220/6.3V
C604 1000P
C602 0.022
R601 18K (1/2W)
D601 10E2
C601 4.7/25V
C603 100/6.3V
US MODEL
49
[AC-SW BOARD]
F801 5.0A
S801
C801 0.01/400V
SWITCHED TOTAL 100W
UNSWITCHED TOTAL 100W
AC OUTLET AC120V 60Hz
PT801 POWER TRANSFORMER
CN802
CN801
AC IN
WHT
ORG
※NOT REPLACEABLE: BUILT IN TRANSFORMER
US MODEL
[AC-SW BOARD]
PT801 POWER TRANSFORMER RED240V(UK) VIO220V(AEP)
CN801 AC OUTLET
SWITCHED 100W MAX
F801 T2.5A
F802 T2.5A
C801 0.01/400V
C802 0.01/400V
AC IN
※NOT REPLACEABLE: BUILT IN TRANSFORMER.
UK, AEP MODEL
[AC-SW BOARD]
F801 T2.5A
S801
C801 0.01/400V
GRY
SWITCHED MAX 100W
CN801 AC OUTLET
UNSWITCHED MAX 100W
SELCTOR POSITION
120V
240V
220V
INTERNAL CONNECTION
AC IN
BRN
ORG
YEL
WHT
VIO
F802 T2.5A
VS801 VOLTAGE SELECTOR
PT801 POWER TRANSFORMER
※NOT REPLACEABLE: BUILT IN TRANSFORMER.
E MODEL
C
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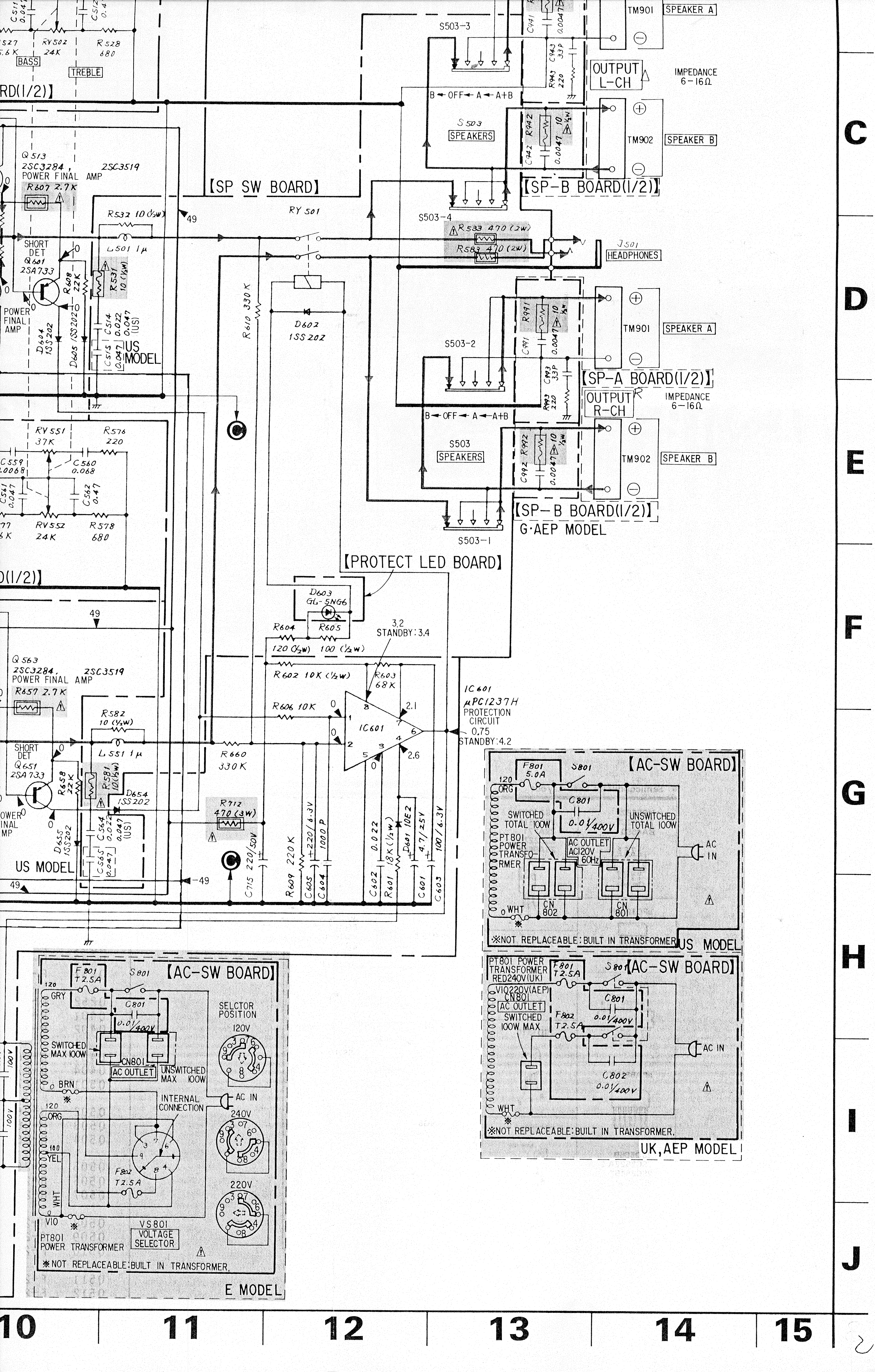
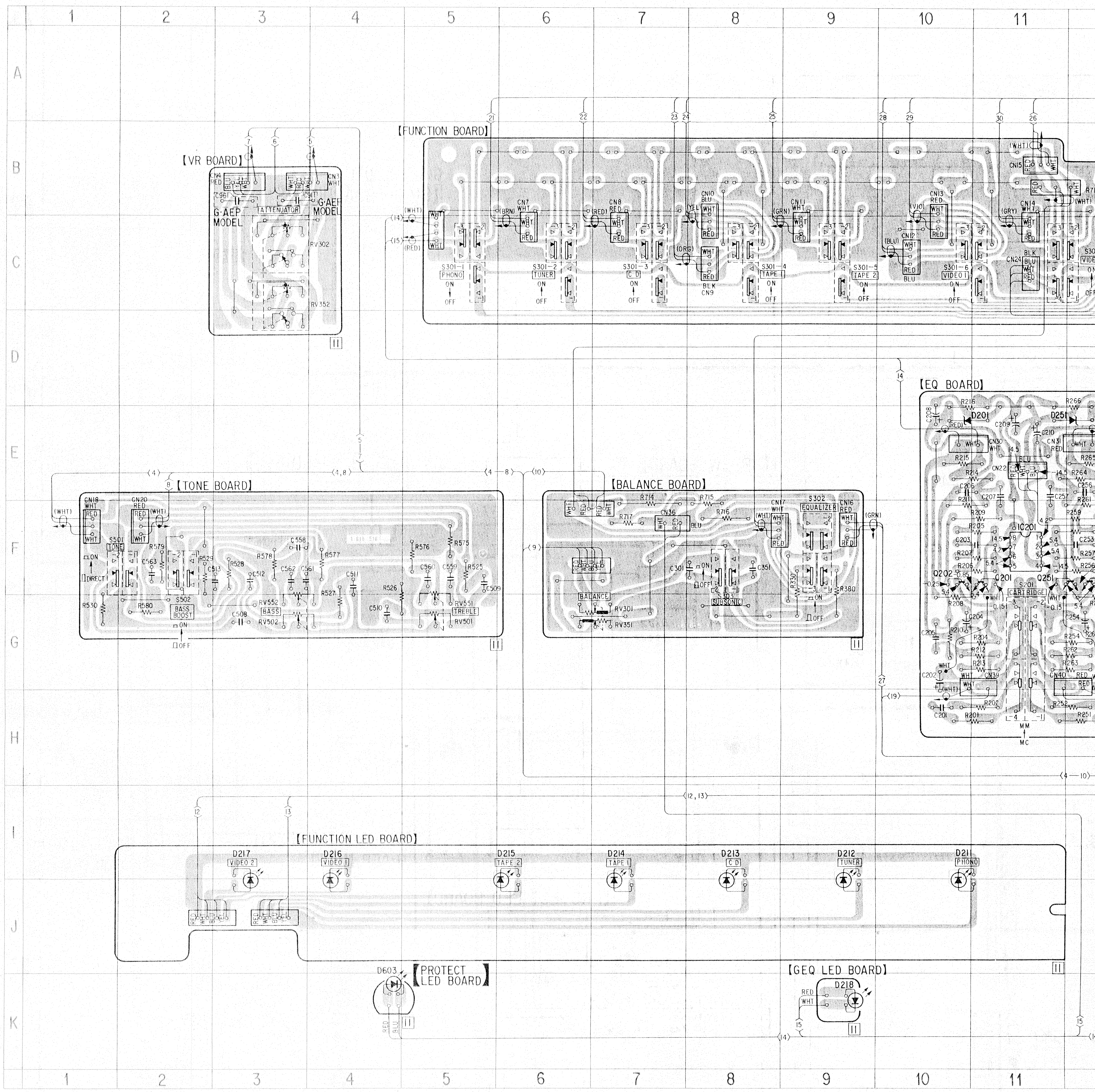
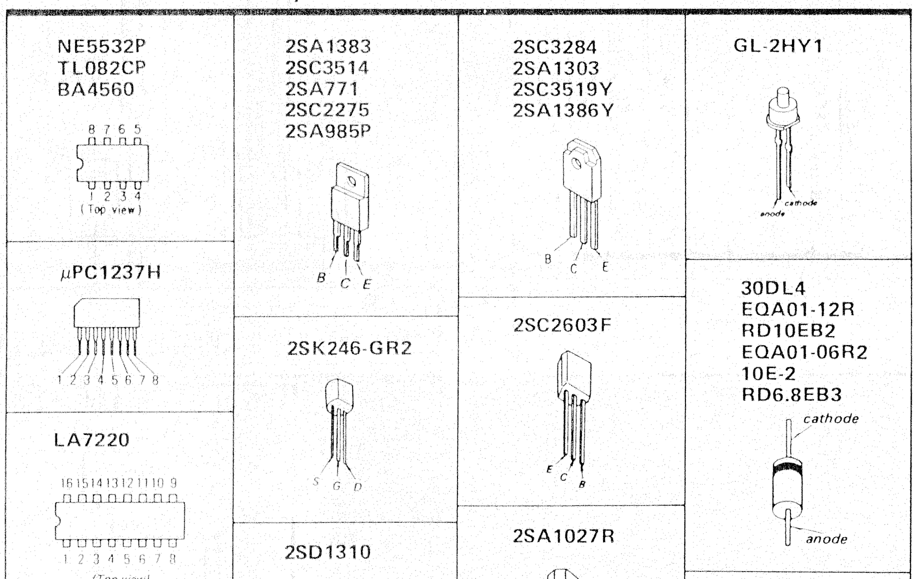
15



BASS
TREBLE
RV502 24K
R527 5.6K
R528 680
Q513
2SC3284, 2SC3519
POWER FINAL AMP
R607 2.7K
SHORT DET
Q601 2SA733
R608 22K
R531 10 (1/2W)
L501 1μ
R532 10 (1/2W)
C514 0.022
0.047 (US)
C515 0.047
US MODEL
D604 1SS202
D605 1SS202
POWER FINAL AMP
[SP SW BOARD]
RY501
R610 330K
D602 1SS202
S503-3
B ← OFF ← A ← A+B
S503 SPEAKERS
S503-4
R533 470 (2W)
R583 470 (2W)
J501 HEADPHONES
C941 0.0047
C943 33P
R943 220
OUTPUT L-CH
IMPEDANCE 6−16Ω
TM901 SPEAKER A
TM902 SPEAKER B
R942 10 1/2W
C942 0.0047
[SP-B BOARD(1/2)]
R991 10 1/2W
C991 0.0047
S503-2
C993 33P
R993 220
[SP-A BOARD(1/2)]
OUTPUT R-CH
IMPEDANCE 6−16Ω
R992 10 1/2W
C992 0.0047
S503-1
[SP-B BOARD(1/2)]
G·AEP MODEL
RV551 37K
R576 220
C559 0.0068
C560 0.068
C561 0.047
C562 0.47
RV552 24K
R578 680
D(1/2)]
[PROTECT LED BOARD]
D603 GL-5NG6
R604 120 (1/2W)
R605 100 (1/2W)
3.2
STANDBY: 3.4
R602 10K (1/2W)
R603 68K
R606 10K
IC601
μPC1237H
PROTECTION CIRCUIT
0.75
STANDBY: 4.2
2.1
2.6
R660 330K
Q563
2SC3284, 2SC3519
POWER FINAL AMP
R657 2.7K
R582 10 (1/2W)
L551 1μ
SHORT DET
Q651 2SA733
R658 22K
R581 10(1/2W)
D654 1SS202
D655 1SS202
C564 0.022
0.047 (US)
C565 0.047
US MODEL
R712 470 (3W)
C715 220/50V
R609 220K
C605 220/6.3V
C604 1000P
C602 0.022
R601 18K (1/2W)
D601 10E2
C601 4.7/25V
C603 100/6.3V
49
[AC-SW BOARD]
F801 5.0A
S801
120 ORG
C801 0.01/400V
SWITCHED TOTAL 100W
UNSWITCHED TOTAL 100W
PT801 POWER TRANSFORMER
AC OUTLET AC120V 60Hz
CN802
CN801
AC IN
WHT
※NOT REPLACEABLE: BUILT IN TRANSFORMER
US MODEL
PT801 POWER TRANSFORMER
RED240V(UK)
VIO220V(AEP)
CN801
AC OUTLET
SWITCHED 100W MAX
F801 T2.5A
S801
[AC-SW BOARD]
C801 0.01/400V
F802 T2.5A
C802 0.01/400V
AC IN
WHT
※NOT REPLACEABLE: BUILT IN TRANSFORMER.
UK, AEP MODEL
F801 T2.5A
S801
[AC-SW BOARD]
120 GRY
C801 0.01/400V
SWITCHED MAX 100W
CN801
AC OUTLET
UNSWITCHED MAX 100W
SELCTOR POSITION
120V
BRN
INTERNAL CONNECTION
AC IN
120 ORG
100 YEL
WHT
240V
F802 T2.5A
220V
VIO
PT801 POWER TRANSFORMER
VS801 VOLTAGE SELECTOR
※NOT REPLACEABLE: BUILT IN TRANSFORMER.
E MODEL
100V
C
D
E
F
G
H
I
J
10
11
12
13
14
15

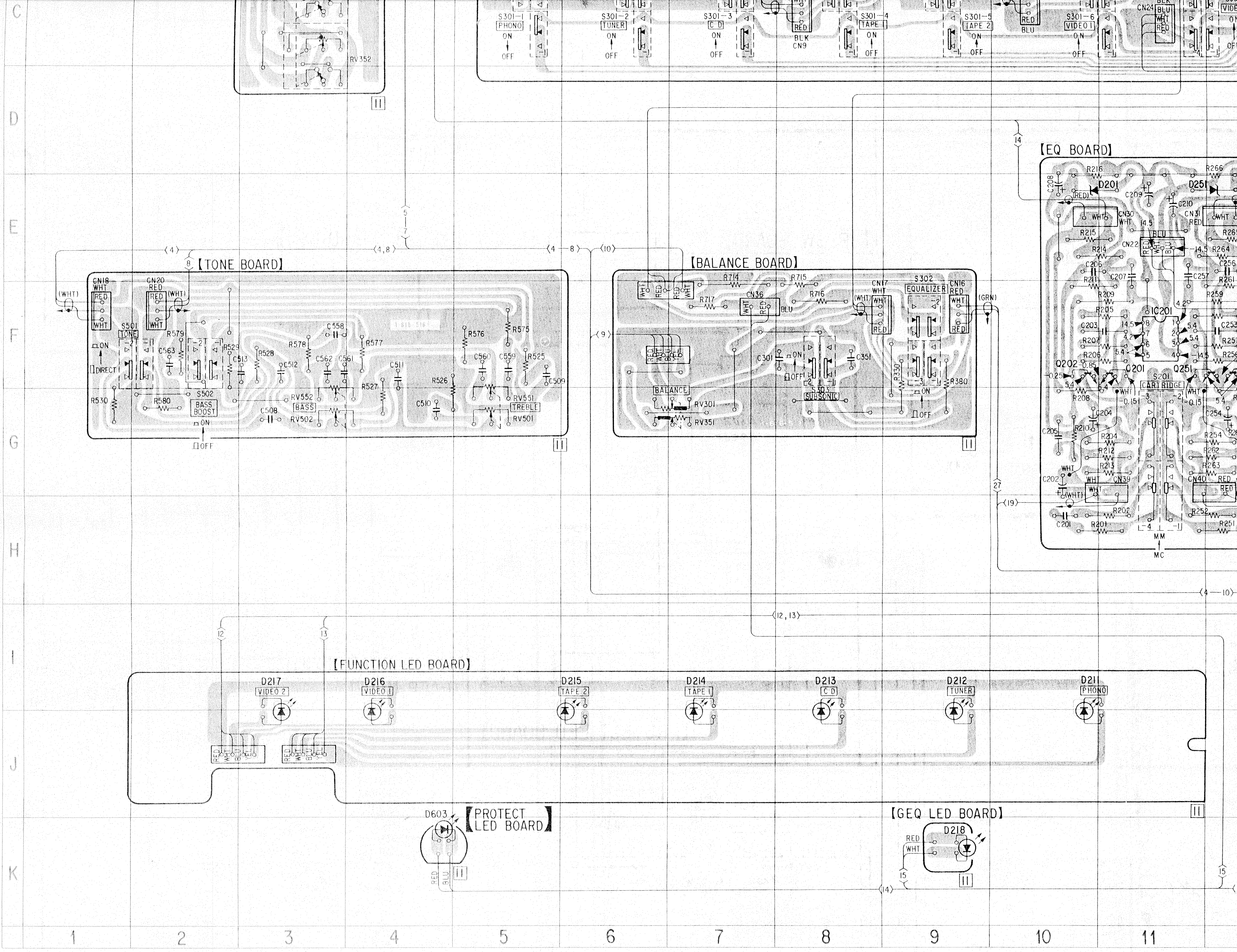

【VR BOARD】
【FUNCTION BOARD】
【EQ BOARD】
【TONE BOARD】
【BALANCE BOARD】
【FUNCTION LED BOARD】
【PROTECT LED BOARD】
【GEQ LED BOARD】
G·AEP MODEL
ATTENUATOR
RV302
RV352
S301-1 PHONO
S301-2 TUNER
S301-3 C D
S301-4 TAPE 1
S301-5 TAPE 2
S301-6 VIDEO 1
S501 TONE
S502 BASS BOOST
RV552 BASS RV502
RV551 TREBLE RV501
BALANCE RV301 RV351
S302 EQUALIZER
S303 SUBSONIC
IC201
S201 CARTRIDGE
MM MC
D217 VIDEO 2
D216 VIDEO 1
D215 TAPE 2
D214 TAPE 1
D213 C D
D212 TUNER
D211 PHONO
D603
D218
A
B
C
D
E
F
G
H
I
J
K
1
2
3
4
5
6
7
8
9
10
11

- Semiconductor Lead Layout

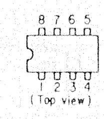
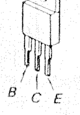
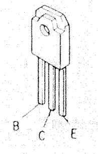
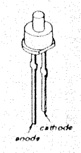
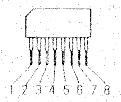
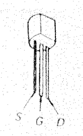
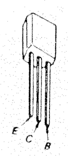
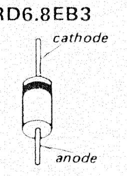
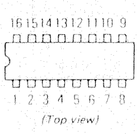
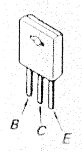
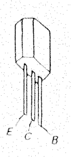
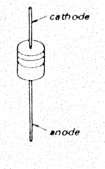
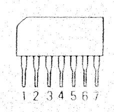
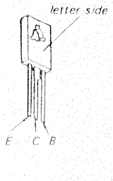
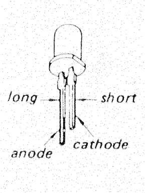
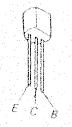

NE5532P
TL082CP
BA4560
8 7 6 5
1 2 3 4
(Top view)
μPC1237H
1 2 3 4 5 6 7 8
LA7220
16 15 14 13 12 11 10 9
1 2 3 4 5 6 7 8
2SA1383
2SC3514
2SA771
2SC2275
2SA985P
B C E
2SK246-GR2
S G D
2SD1310
2SC3284
2SA1303
2SC3519Y
2SA1386Y
B C E
2SC2603F
E C B
2SA1027R
GL-2HY1
cathode
anode
30DL4
EQA01-12R
RD10EB2
EQA01-06R2
10E-2
RD6.8EB3
cathode
anode

- **SEMICONDUCTOR LOCATION**

Ref.No.	Location	Ref
IC201	F-11	Q
IC301	J-28	Q
IC302	I-28	Q
IC351	J-27	Q
IC401	B-24	Q
IC601	I-23	Q
Q201	F-11	Q
Q202	F-10	Q
Q251	F-11	Q
Q252	F-12	Q
Q401	B-25	Q
Q402	B-25	Q

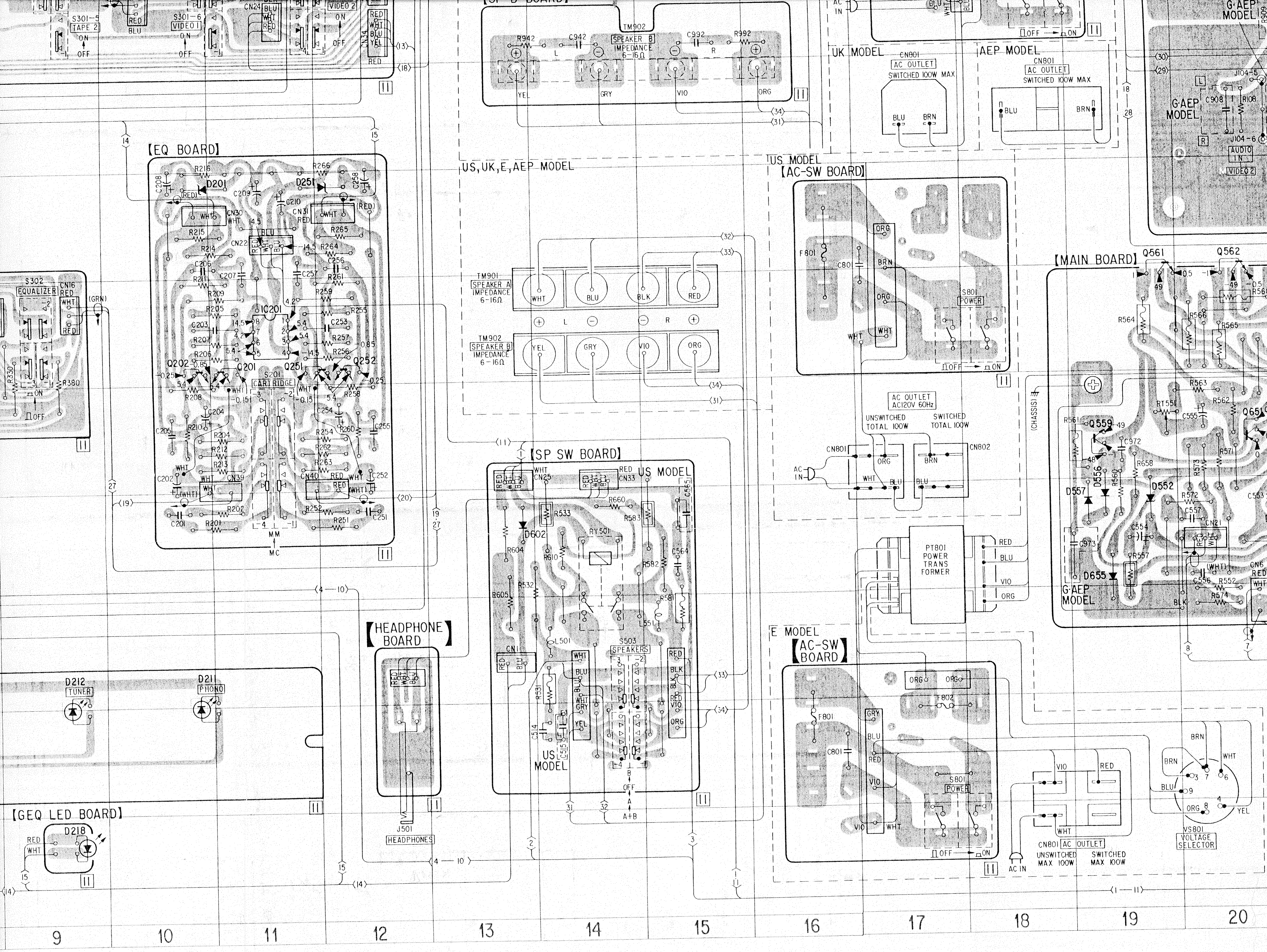

【TONE BOARD】
【BALANCE BOARD】
【EQ BOARD】
【FUNCTION LED BOARD】
【PROTECT LED BOARD】
【GEQ LED BOARD】
S301-1 PHONO
S301-2 TUNER
S301-3 C D
S301-4 TAPE 1
S301-5 TAPE 2
S301-6 VIDEO 1
S501 TONE
S502 BASS BOOST
RV551 TREBLE
RV552 BASS
RV501
RV502
S302 EQUALIZER
S303 SUBSONIC
BALANCE
RV301
RV351
S201 CARTRIDGE
IC201
Q201
Q202
Q251
MM
MC
D217 VIDEO 2
D216 VIDEO 1
D215 TAPE 2
D214 TAPE 1
D213 C D
D212 TUNER
D211 PHONO
D603
D218
C
D
E
F
G
H
I
J
K
1
2
3
4
5
6
7
8
9
10
11

● Semiconductor Lead Layout

NE5532P TL082CP BA4560  8 7 6 5 1 2 3 4 (Top view)	2SA1383 2SC3514 2SA771 2SC2275 2SA985P 	2SC3284 2SA1303 2SC3519Y 2SA1386Y 	GL-2HY1  cathode anode
μPC1237H 	2SK246-GR2 	2SC2603F 	30DL4 EQA01-12R RD10EB2 EQA01-06R2 10E-2 RD6.8EB3  cathode anode
LA7220  16 15 14 13 12 11 10 9 1 2 3 4 5 6 7 8 (Top view)	2SD1310 	2SA1027R 	1SS202-1  cathode anode
μPA68H-K 	2SD809  letter side E C B	GL-5NG6  long short anode cathode	
2SD666B 2SC3622A-L 2SC2545E 2SC1364 			

● SEMICONDUCTOR LOCATION

Ref.No.	Location
IC201	F-11
IC301	J-28
IC302	I-28
IC351	J-27
IC401	B-24
IC601	I-23
Q201	F-11
Q202	F-10
Q251	F-11
Q252	F-12
Q401	B-25
Q402	B-25
Q403	B-26
Q404	B-27
Q501	I-27
Q502	H-26
Q503	H-26
Q504	H-26
Q505	H-26
Q506	H-26
Q507	H-27
Q508	H-27
Q509	G-29
Q510	F-25
Q511	F-28
Q512	F-28
Q513	F-25


S301-5 TAPE 2
S301-6 VIDEO 1
VIDEO 2
SP-B BOARD
TM902 SPEAKER B IMPEDANCE 6-16Ω
UK MODEL
CN801 AC OUTLET SWITCHED 100W MAX
AEP MODEL
CN801 AC OUTLET SWITCHED 100W MAX
G·AEP MODEL
【EQ BOARD】
IC201
CART RIDGE
S302 EQUALIZER
US,UK,E,AEP MODEL
TM901 SPEAKER A IMPEDANCE 6-16Ω
TM902 SPEAKER B IMPEDANCE 6-16Ω
US MODEL
【AC-SW BOARD】
S801 POWER
AC OUTLET AC120V 60Hz
UNSWITCHED TOTAL 100W
SWITCHED TOTAL 100W
CN801
CN802
(CHASSIS)
【MAIN BOARD】
G·AEP MODEL
【SP SW BOARD】
US MODEL
RY501
S503 SPEAKERS
OFF A B A+B
【HEADPHONE BOARD】
J501 HEADPHONES
PT801 POWER TRANS FORMER
E MODEL
【AC-SW BOARD】
S801 POWER
CN801 AC OUTLET
UNSWITCHED MAX 100W
SWITCHED MAX 100W
AC IN
VS801 VOLTAGE SELECTOR
D212 TUNER
D211 PHONO
【GEQ LED BOARD】
D218
9
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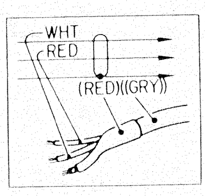
20

• SEMICONDUCTOR LOCATION

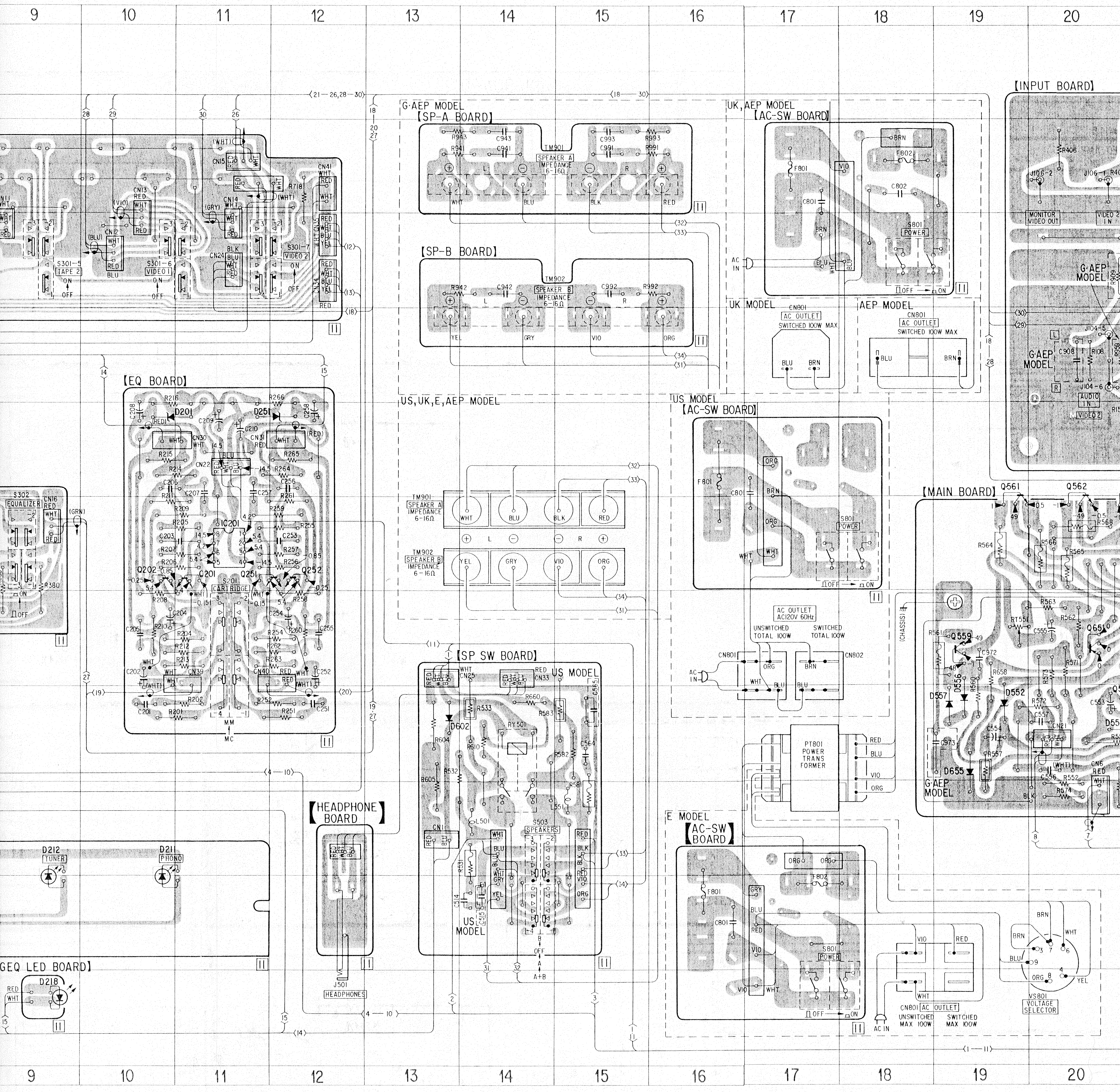
Ref.No.	Location	Ref.No.	Location
IC201	F-11	Q514	F-27
IC301	J-28	Q551	I-21
IC302	I-28	Q552	H-22
IC351	J-27	Q553	H-22
IC401	B-24	Q554	H-22
IC601	I-23	Q555	H-22
Q201	F-11	Q556	H-21
Q202	F-10	Q557	H-21
Q251	F-11	Q558	H-21
Q252	F-12	Q559	G-19
Q401	B-25	Q560	F-22
Q402	B-25	Q561	F-19
Q403	B-26	Q562	F-20
Q404	B-27	Q563	F-23
Q501	I-27	Q564	F-21
Q502	H-26	Q601	G-27
Q503	H-26	Q651	G-20
Q504	H-26	Q701	J-23
Q505	H-26	Q702	J-23
Q506	H-26	Q703	J-23
Q507	H-27	Q704	J-23
Q508	H-27	Q705	J-24
Q509	G-29	Q706	J-24
Q510	F-25	Q707	J-24
Q511	F-28	Q708	J-24
Q512	F-28	Q709	B-28
Q513	F-25		

Note:

- Color code of sleeving over the end of the jacket.


WHT
RED
(RED)(GRY)

- ○— : parts extracted from the component side.
- ●— : parts extracted from the conductor side.

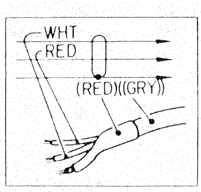

[INPUT BOARD]
G·AEP MODEL
[SP-A BOARD]
TM901 SPEAKER A IMPEDANCE 6-16Ω
[SP-B BOARD]
TM902 SPEAKER B IMPEDANCE 6-16Ω
UK, AEP MODEL
[AC-SW BOARD]
S801 POWER
UK MODEL
CN801 AC OUTLET SWITCHED 100W MAX
AEP MODEL
CN801 AC OUTLET SWITCHED 100W MAX
[EQ BOARD]
IC201
S201 CARTRIDGE
MM
MC
US, UK, E, AEP MODEL
US MODEL
[AC-SW BOARD]
AC OUTLET AC120V 60Hz
UNSWITCHED TOTAL 100W
SWITCHED TOTAL 100W
[MAIN BOARD]
G·AEP MODEL
PT801 POWER TRANS FORMER
[SP SW BOARD]
US MODEL
S503 SPEAKERS
OFF
A
B
A+B
[HEADPHONE BOARD]
J501 HEADPHONES
E MODEL
[AC-SW BOARD]
CN801 AC OUTLET
UNSWITCHED MAX 100W
SWITCHED MAX 100W
AC IN
VS801 VOLTAGE SELECTOR
D212 TUNER
D211 PHONO
GEQ LED BOARD]
D218
S302 EQUALIZER
S301-5 TAPE 2
S301-6 VIDEO 1
S301-7 VIDEO 2
MONITOR VIDEO OUT
(CHASSIS)

- **SEMICONDUCTOR LOCATION**

Ref.No.	Location	Ref.No.	Location
IC201	F-11	Q514	F-27
IC301	J-28	Q551	I-21
IC302	I-28	Q552	H-22
IC351	J-27	Q553	H-22
IC401	B-24	Q554	H-22
IC601	I-23	Q555	H-22
Q201	F-11	Q556	H-21
Q202	F-10	Q557	H-21
Q251	F-11	Q558	H-21
Q252	F-12	Q559	G-19
Q401	B-25	Q560	F-22
Q402	B-25	Q561	F-19

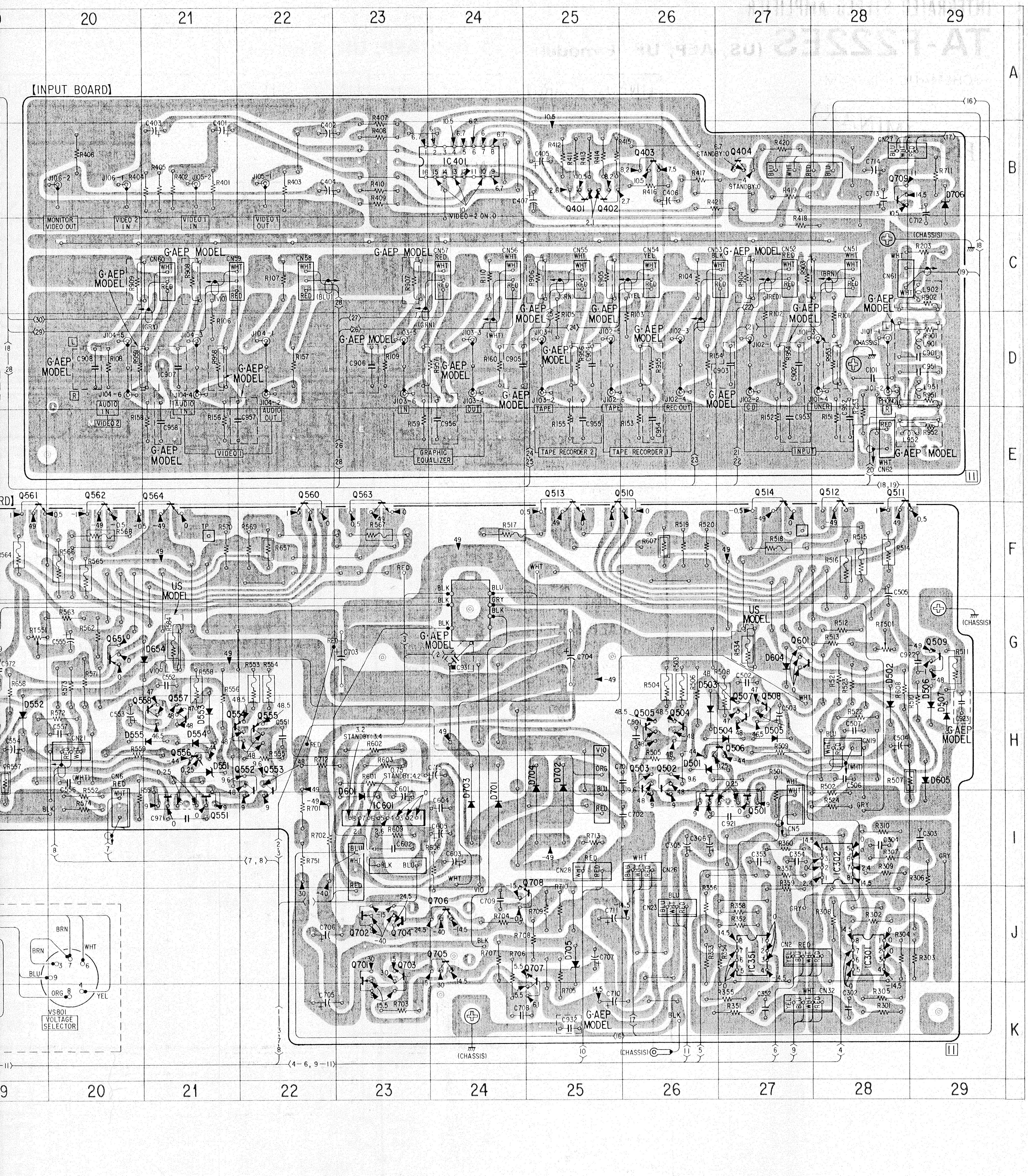
Note:

- Color code of sleeving over the end of the jacket.

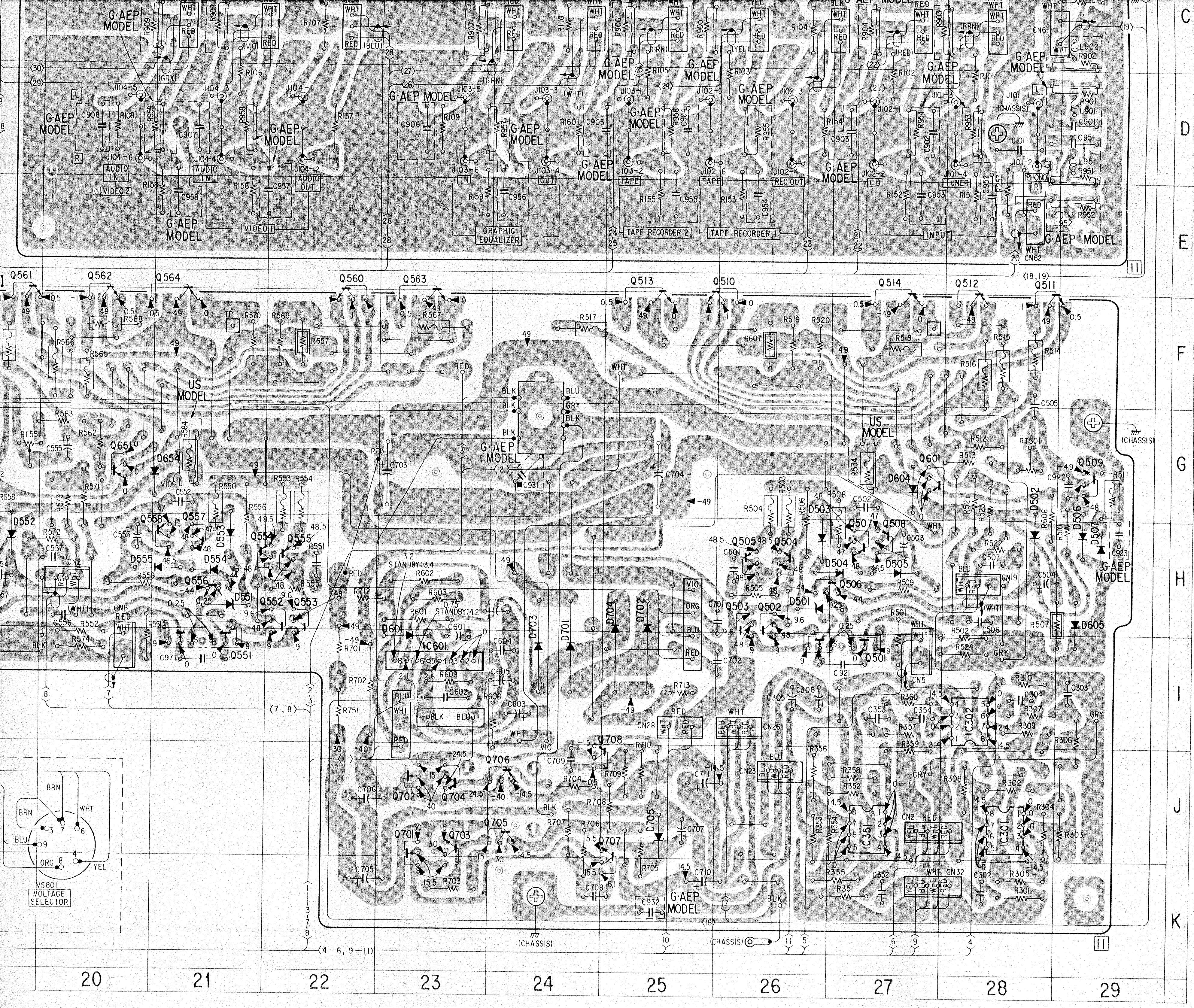

WHT
RED
(RED)(GRY)

- ○— : parts extracted from the component side.
- ●— : parts extracted from the conductor side.

(TA-F222ES)



[INPUT BOARD]
IC401
IC601
IC301
IC302
IC351
MONITOR VIDEO OUT
VIDEO 2 IN
VIDEO 1 IN
VIDEO 1 OUT
AUDIO IN
VIDEO 2
AUDIO OUT
VIDEO 1
GRAPHIC EQUALIZER
TAPE RECORDER 2
TAPE RECORDER 1
INPUT
TAPE
REC OUT
CD
TUNER
PHONO
G·AEP MODEL
US MODEL
STANDBY
CHASSIS
VS801 VOLTAGE SELECTOR
20
21
22
23
24
25
26
27
28
29
A
B
C
D
E
F
G
H
I
J
K


G·AEP MODEL
US MODEL
AUDIO IN
VIDEO 2
AUDIO IN
VIDEO 1
AUDIO OUT
GRAPHIC EQUALIZER
IN
OUT
TAPE
TAPE RECORDER 2
TAPE
TAPE RECORDER 1
REC OUT
CD
TUNER
INPUT
PHONO
CHASSIS
IC601
IC301
IC302
STANDBY: 3.4
STANDBY: 4.2
VS801
VOLTAGE SELECTOR
BRN
WHT
BLU
ORG
YEL
RED
BLK
GRY
CN61
CN62
CN19
CN21
CN28
CN26
CN23
CN2
CN32
CN5
CN6
C
D
E
F
G
H
I
J
K
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English
85J0621-1
Printed in Japan
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4

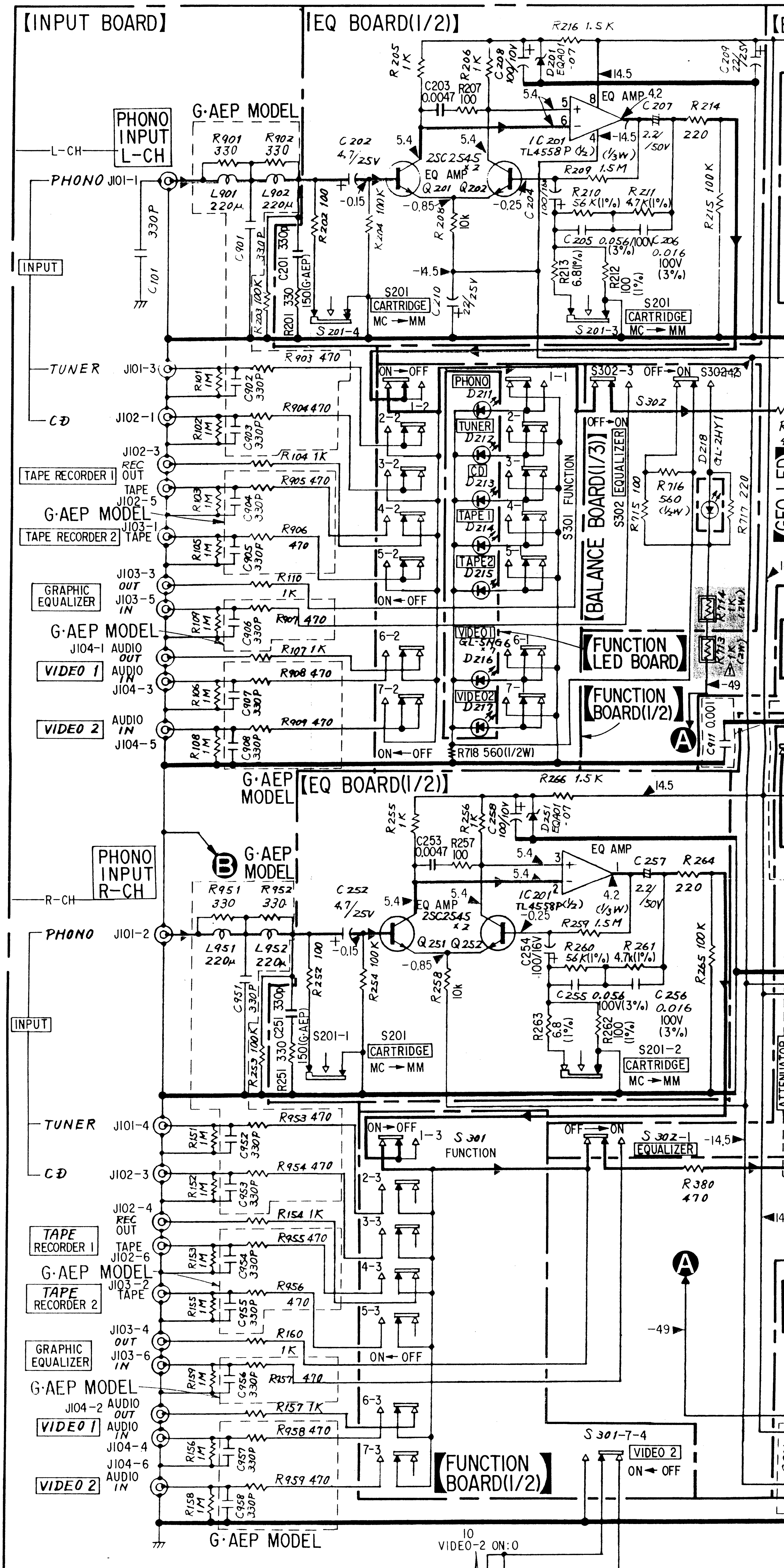
SONY®

INTEGRATED STEREO AMPLIFIER
TA-F222ES

US Model
AEP Model
UK Model
E Model

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

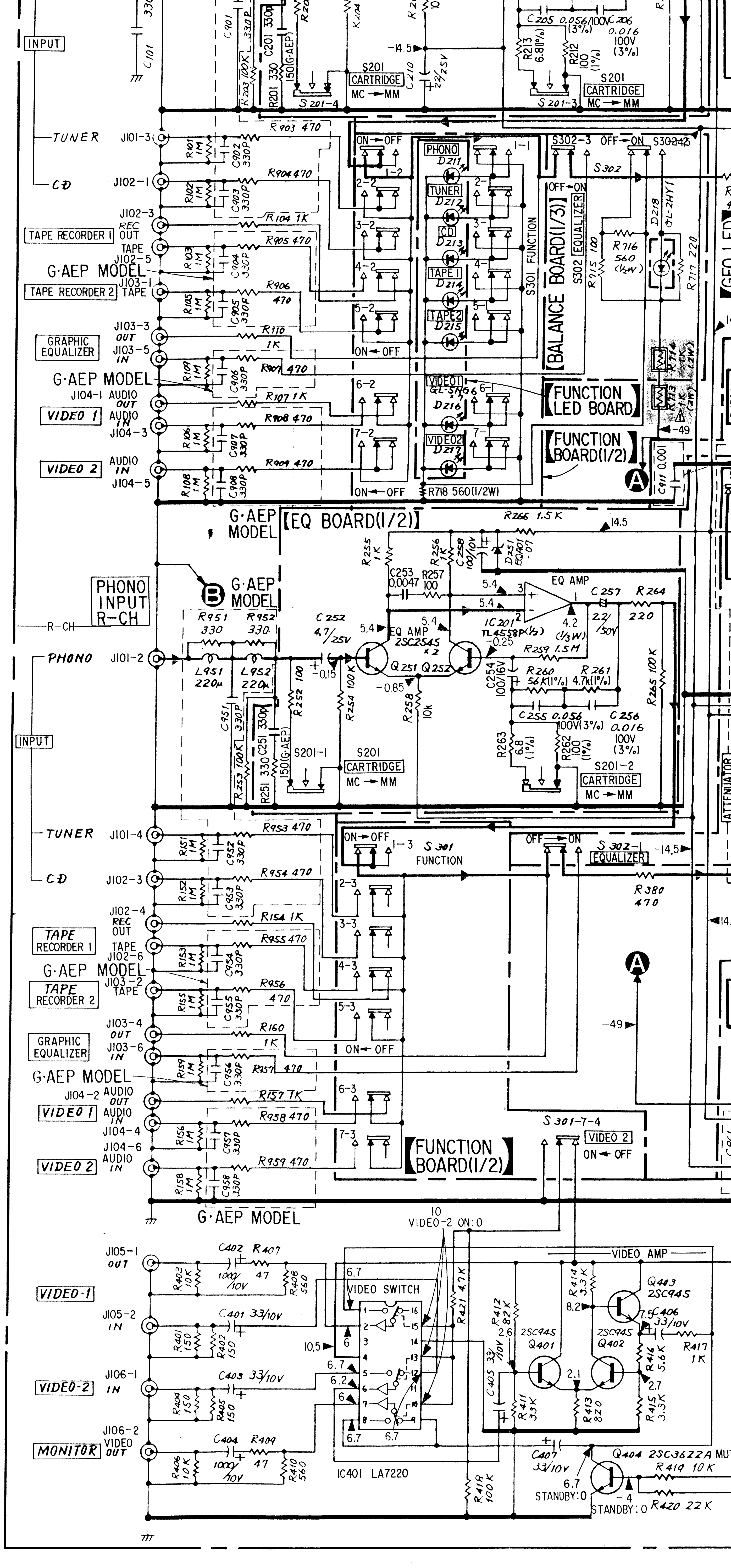
SCHEMATIC DIAGRAM



【INPUT BOARD】
【EQ BOARD(1/2)】
PHONO INPUT L-CH
PHONO INPUT R-CH
G·AEP MODEL
L-CH
R-CH
PHONO J101-1
PHONO J101-2
TUNER J101-3
TUNER J101-4
CD J102-1
CD J102-3
TAPE RECORDER I
TAPE RECORDER 2
REC OUT
TAPE
GRAPHIC EQUALIZER
OUT
IN
VIDEO 1
VIDEO 2
AUDIO OUT
AUDIO IN
INPUT
EQ AMP
2SC2545 ×2
IC201 TL4558P (1/2)
Q201 Q202
Q251 Q252
S201 CARTRIDGE MC → MM
S201-1
S201-2
S201-3
S201-4
S301 FUNCTION
S302 EQUALIZER
S302-1 EQUALIZER
S301-7-4
BALANCE BOARD(1/3)
【FUNCTION LED BOARD】
【FUNCTION BOARD(1/2)】
ON → OFF
OFF → ON
PHONO D211
TUNER D212
CD D213
TAPE I D214
TAPE2 D215
VIDEO1 GL-5HG6 D216
VIDEO2 D217
R718 560(1/2W)
D218 GL-2HY1
VIDEO 2 ON ← OFF
10 VIDEO-2 ON:0
A
B
14.5
-14.5
-49

Note:

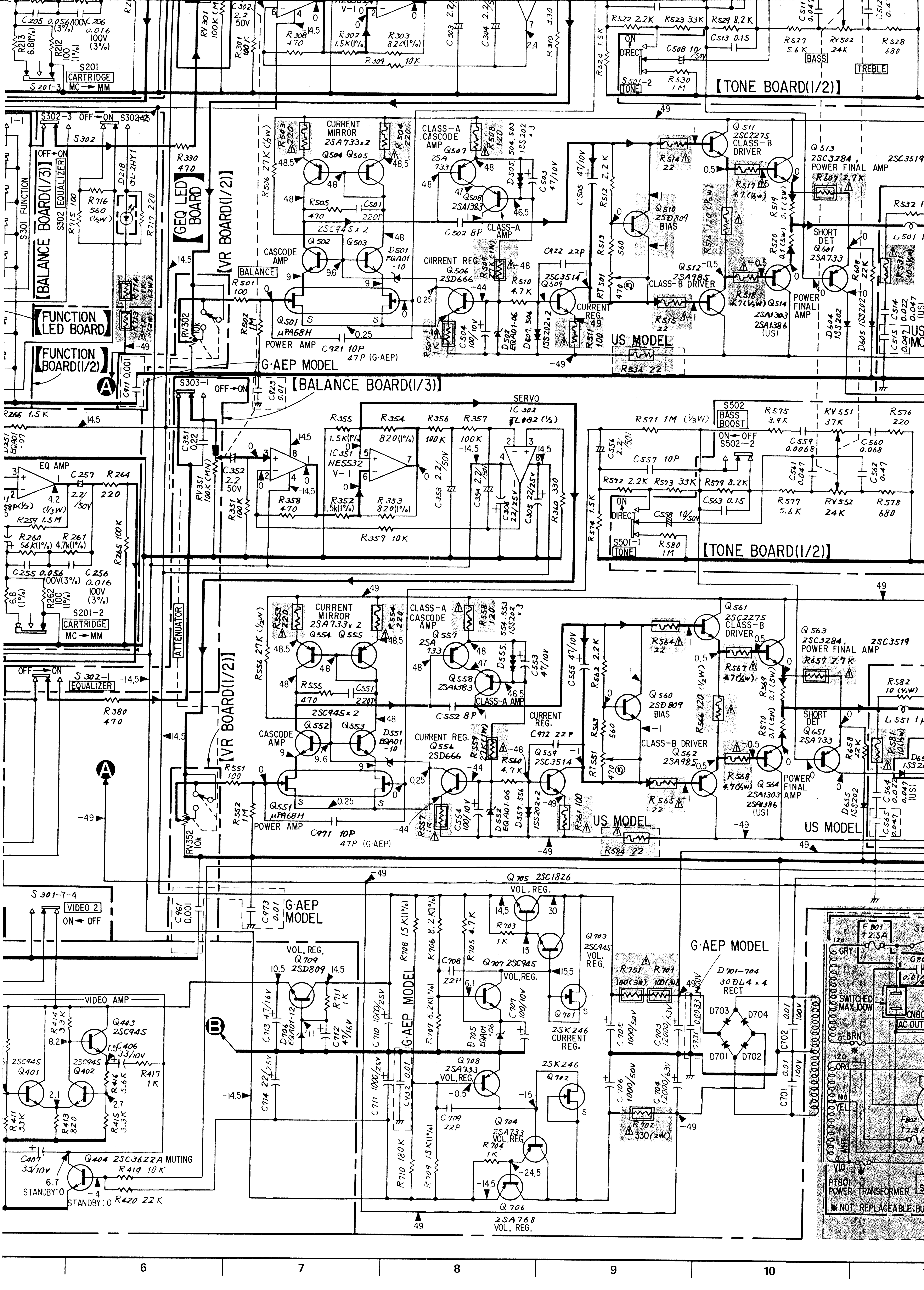
- All capacitors are in μF unless otherwise noted. pF: $\mu\mu$F 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- ➡ : signal path.

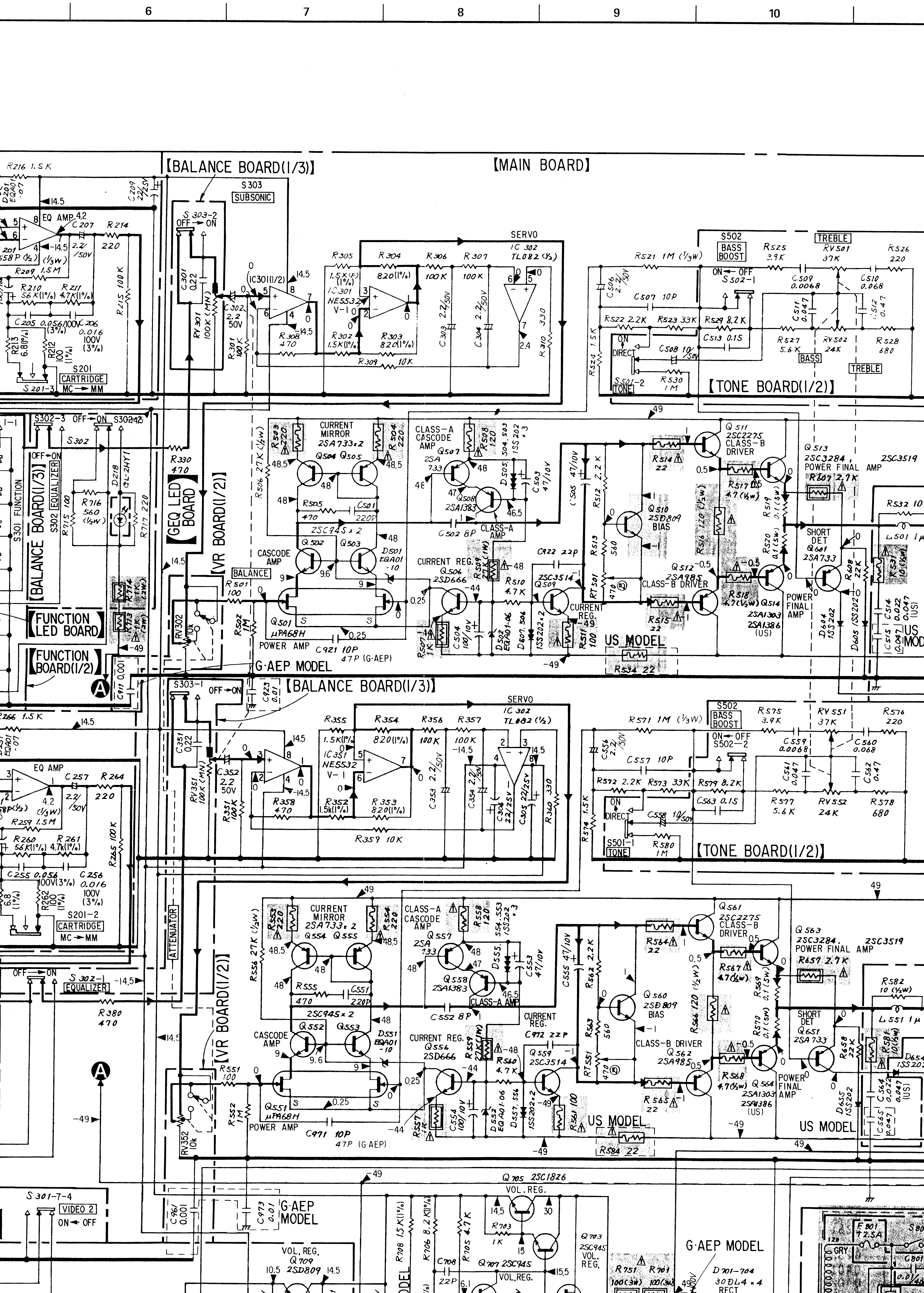

INPUT
TUNER
CD
J101-3
J102-1
J102-3
REC OUT
TAPE RECORDER I
TAPE
J102-5
G·AEP MODEL
J103-1
TAPE RECORDER 2
J103-3
OUT
J103-5
IN
GRAPHIC EQUALIZER
J104-1 AUDIO OUT
VIDEO 1
AUDIO IN
J104-3
VIDEO 2
AUDIO IN
J104-5
R101 1M
R102 1M
R103 1M
R105 1M
R109 1M
R106 1M
R108 1M
C902 330P
C903 330P
C904 330P
C905 330P
C906 330P
C907 330P
C908 330P
R903 470
R904 470
R104 1K
R905 470
R906 470
R110 1K
R907 470
R107 1K
R908 470
R909 470
C101
C901 330P
C201 330
R203 100K
R201 330
150(G·AEP)
S201-4
S201
CARTRIDGE
MC → MM
C210 22/25V
-14.5
C205 0.056/100V (3%)
C206 0.016 100V (3%)
R213 6.81(1%)
R212 100 (1%)
S201-3
S302-3 OFF → ON
S302-2
S302
ON → OFF
1-2
1-1
PHONO
D211
TUNER
D212
CD
D213
TAPE I
D214
TAPE2
D215
VIDEO1
GL-5NG6
D216
VIDEO2
D217
2-2
3-2
4-2
5-2
6-2
7-2
6-1
ON ← OFF
S301 FUNCTION
BALANCE BOARD(1/3)
S302 EQUALIZER
OFF → ON
R715 100
R716 560 (1/2W)
D218 GL-2HY1
R717 220
R714 1K (2W)
R713 1K (2W)
-49
FUNCTION LED BOARD
FUNCTION BOARD(1/2)
C911 0.001
A
R718 560(1/2W)
G·AEP MODEL
EQ BOARD(1/2)
R266 1.5K
14.5
R255 1K
R256 1K
C258 100/10V
D251 EQA01-07
C253 0.0047
R257 100
5.4
EQ AMP
C257 22/50V
R264 220
IC201 TL4558P(1/2)
4.2
(1/3W)
-0.25
R259 1.5M
PHONO INPUT R-CH
B
G·AEP MODEL
R-CH
R951 330
R952 330
C252 4.7/25V
EQ AMP 2SC2545 ×2
Q251
Q252
PHONO
J101-2
L951 220μ
L952 220μ
-0.15
-0.85
C254 100/16V
R260 56K(1%)
R261 4.7K(1%)
R265 100K
R252 100
R254 100K
R258 10K
C951 330P
C251 330
R253 100K
R251 330
150(G·AEP)
S201-1
S201 CARTRIDGE MC → MM
C255 0.056 100V(3%)
C256 0.016 100V (3%)
R263 6.8 (1%)
R262 100 (1%)
S201-2
CARTRIDGE MC → MM
INPUT
TUNER
J101-4
CD
J102-3
R151 1M
C952 330P
R953 470
R152 1M
C953 330P
R954 470
J102-4 REC OUT
TAPE RECORDER I
TAPE J102-6
R154 1K
R153 1M
C954 330P
R955 470
G·AEP MODEL
TAPE RECORDER 2
J103-2 TAPE
R155 1M
C955 330P
R956 470
J103-4 OUT
GRAPHIC EQUALIZER
J103-6 IN
R160 1K
R159 1M
C956 330P
R957 470
G·AEP MODEL
J104-2 AUDIO OUT
VIDEO 1
AUDIO IN
J104-4
R157 1K
R958 470
J104-6
VIDEO 2
AUDIO IN
R156 1M
C957 330P
R158 1M
C958 330P
R959 470
G·AEP MODEL
ON → OFF
1-3
S301 FUNCTION
2-3
3-3
4-3
5-3
6-3
7-3
ON ← OFF
FUNCTION BOARD(1/2)
OFF → ON
S302-1 EQUALIZER
-14.5
R380 470
14.
A
-49
S301-7-4
VIDEO 2 ON ← OFF
ATTENUATOR
10
VIDEO-2 ON:0
J105-1 OUT
VIDEO-1
J105-2 IN
C402 R407
1000/10V 47
R403 10K
R408 560
C401 33/10V
R401 150
R402 150
J106-1 IN
VIDEO-2
C403 33/10V
R404 150
R405 150
J106-2 VIDEO OUT
MONITOR
C404 R409
1000/10V 47
R406 10K
R410 560
6.7
VIDEO SWITCH
10.5
6.7
6.2
6
IC401 LA7220
R421 4.7K
R418 100K
VIDEO AMP
R412 82K
2.6
R414 3.3K
8.2
Q403 2SC945
C406 33/10V
7.5
2SC945 Q401
2SC945 Q402
R416 5.6K
R417 1K
C405 33/10V
R411 33K
2.1
R413 820
2.7
R415 3.3K
C407 33/10V
6.7
STANDBY:0
Q404 2SC3622A MU
R419 10K
-4
STANDBY:0
R420 22K
C
D
E
F
G
H
I
J
1
2
3
4
5
6

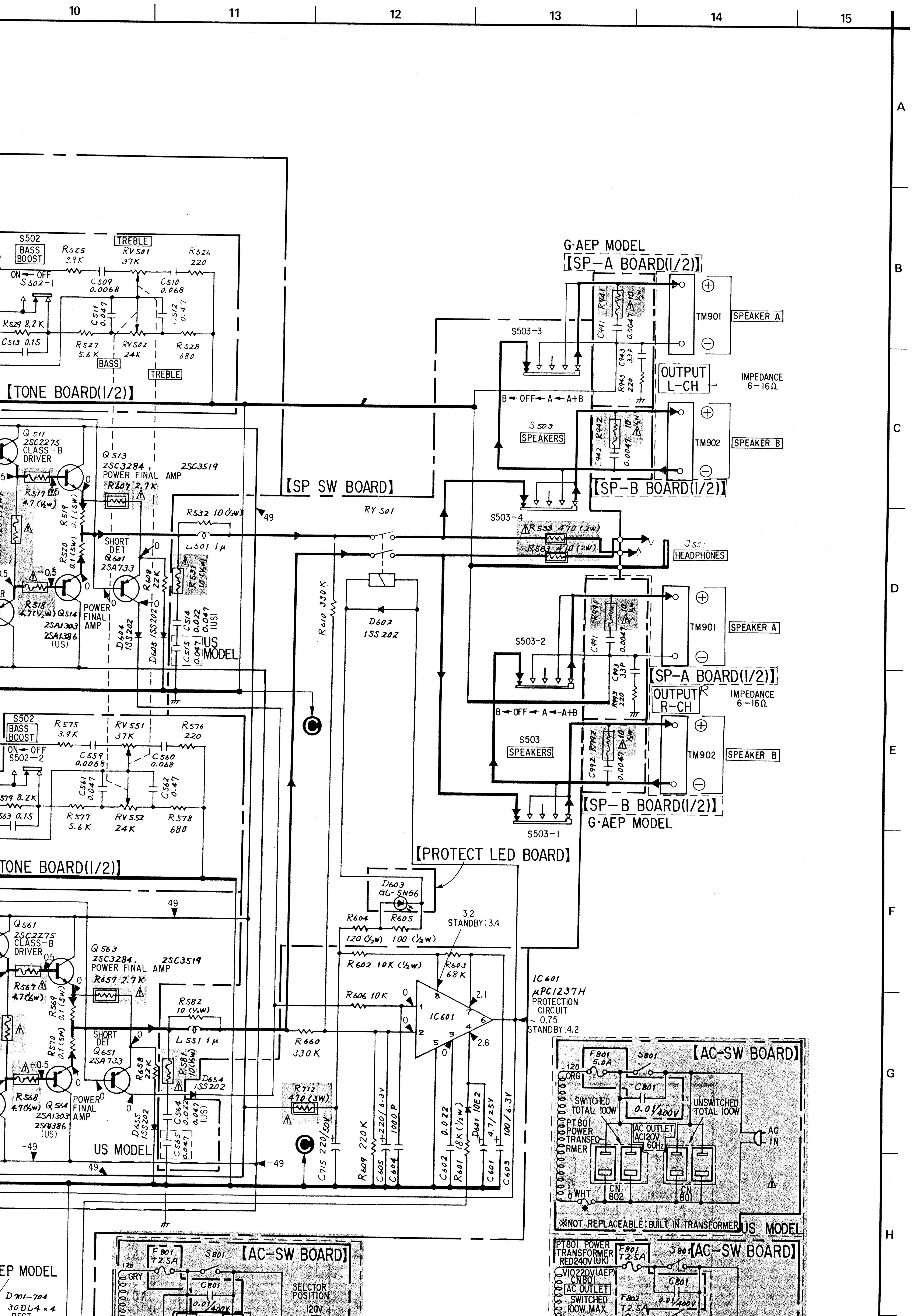
Note:

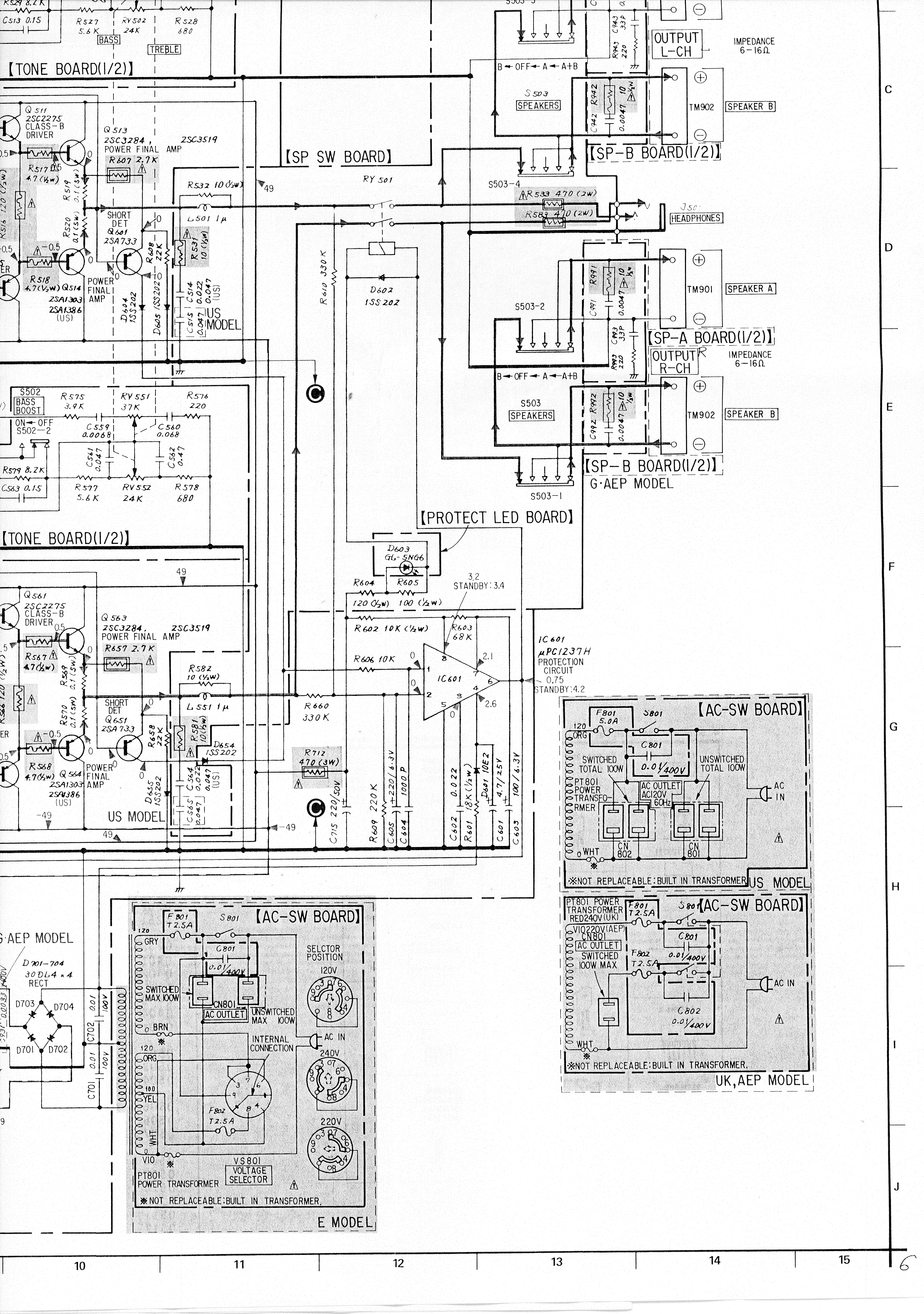
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- ➡ : signal path.
- ▭ : nonflammable resistor.
- ▭ : fusible resistor.
- ——— : B+ bus.
- – – – : B- bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal conditions with a VOM (50 kΩ/V).
- Voltage variations may be noted due to normal production tolerances.

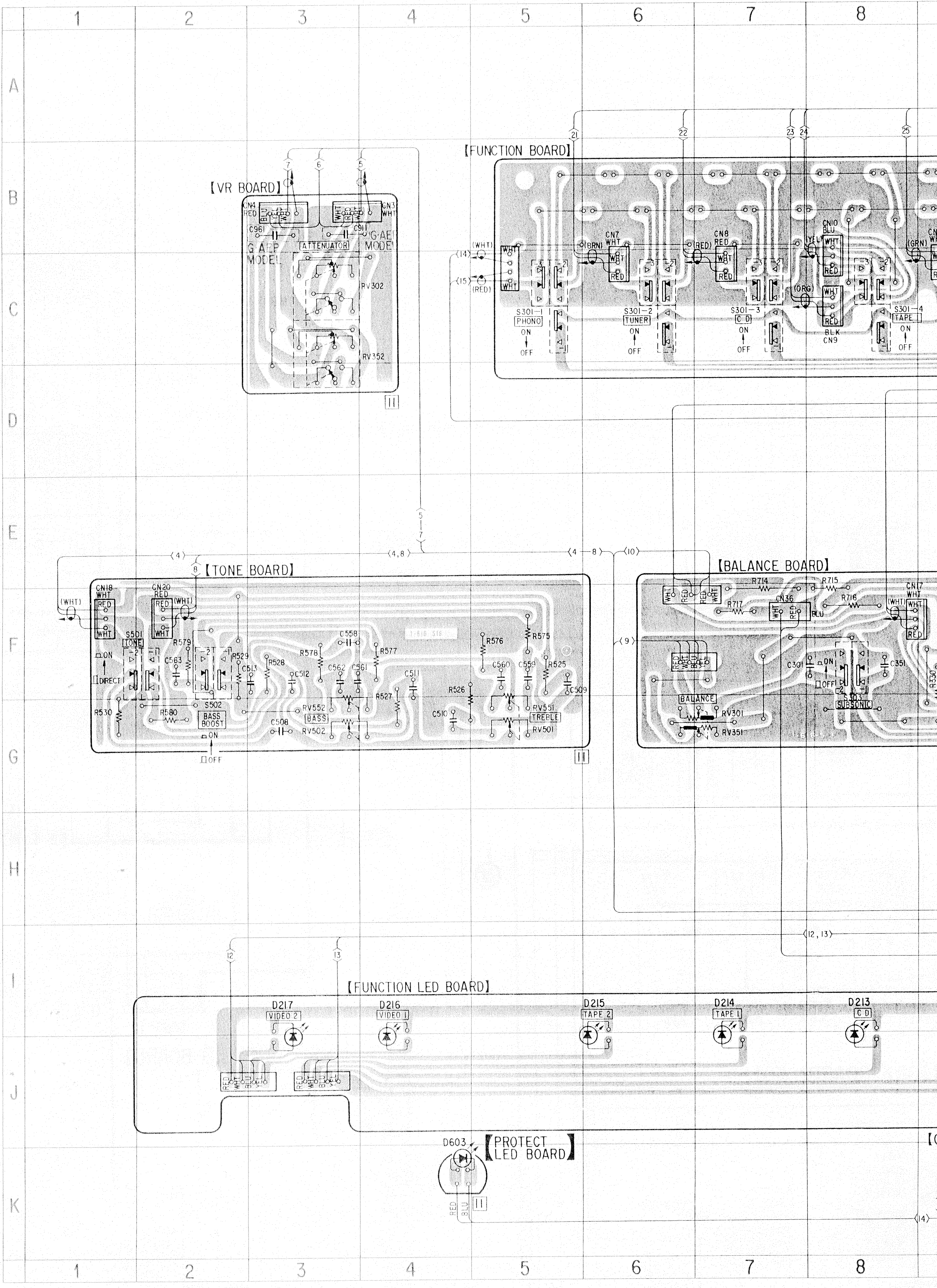
5


S201 CARTRIDGE MC → MM
TONE BOARD(1/2)
BASS
TREBLE
S501-2 TONE
ON DIRECT
BALANCE BOARD(1/3) EQUALIZER
S302 EQUALIZER
S301 FUNCTION
S302-3 OFF → ON
GEQ LED BOARD
VR BOARD(1/2)
FUNCTION LED BOARD
FUNCTION BOARD(1/2)
BALANCE
CURRENT MIRROR 2SA733×2
Q504 Q505
CLASS-A CASCODE AMP
Q507 2SA733
Q508 2SA1383
CLASS-A AMP
CASCODE AMP
Q502 Q503 2SC945×2
D501 EQA01-10
CURRENT REG. Q506 2SD666
Q501 μPA68H POWER AMP
C921 10P 47P (G·AEP)
Q509 2SC3514 CURRENT REG.
Q510 2SD809 BIAS
Q511 2SC2275 CLASS-B DRIVER
Q512 2SA985 CLASS-B DRIVER
Q513 2SC3284, 2SC3519 POWER FINAL AMP
Q514 2SA1303 2SA1386 (US) POWER FINAL AMP
SHORT DET Q601 2SA733
US MODEL
R534 22
G·AEP MODEL
BALANCE BOARD(1/3)
S303-1 OFF → ON
SERVO IC302 TL082 (½)
IC351 NE5532 V-1
EQ AMP
S502 BASS BOOST
S502-2 ON ← OFF
S501-1 TONE
TONE BOARD(1/2)
S201-2 CARTRIDGE MC → MM
ATTENUATOR
S302-1 EQUALIZER OFF → ON
VR BOARD(1/2)
CURRENT MIRROR 2SA733×2 Q554 Q555
CLASS-A CASCODE AMP Q557 2SA733
Q558 2SA1383 CLASS-A AMP
CASCODE AMP Q552 Q553 2SC945×2
D551 EQA01-10
CURRENT REG. Q556 2SD666
Q551 μPA68H POWER AMP
C971 10P 47P (G·AEP)
Q559 2SC3514 CURRENT REG.
Q560 2SD809 BIAS
Q561 2SC2275 CLASS-B DRIVER
Q562 2SA985 CLASS-B DRIVER
Q563 2SC3284, 2SC3519 POWER FINAL AMP
Q564 2SA1303 2SA1386 (US) POWER FINAL AMP
SHORT DET Q651 2SA733
US MODEL
R584 22
RV352 10K
A
B
S301-7-4 VIDEO 2 ON ← OFF
G·AEP MODEL
VIDEO AMP
Q401 2SC945
Q402 2SC945
Q403 2SC945
Q404 2SC3622A MUTING
STANDBY: 0
VOL. REG. Q709 2SD809
G·AEP MODEL
Q705 2SC1826 VOL. REG.
Q707 2SC945 VOL. REG.
Q703 2SC945 VOL. REG.
Q701 2SK246 CURRENT REG.
Q708 2SA733 VOL. REG.
Q704 2SA733 VOL. REG.
Q702 2SK246
Q706 2SA768 VOL. REG.
G·AEP MODEL
D701-704 30DL4×4 RECT
R751 100(3W)
R701 100(3W)
R702 330(2W)
F801 T2.5A
SWITCHED MAX 100W
AC OUT
PT801 POWER TRANSFORMER
✱ NOT REPLACEABLE: BU
6
7
8
9
10


6
7
8
9
10
【BALANCE BOARD(1/3)】
【MAIN BOARD】
S303
SUBSONIC
S303-2
OFF → ON
SERVO
IC302
TL082(½)
IC301(1/2)
IC301
NE5532
V-1
R216 1.5K
EQ AMP
C207 2.2/50V
R214 220
R215 100K
R209 1.5M
R210 56K(1%)
R211 4.7K(1%)
C205 0.056/100V
C206 0.016 100V (3%)
R213 6.8(1%)
R212 100 (1%)
S201
CARTRIDGE
S201-3 MC → MM
C301 0.22
RV301 100K(MN)
C302 2.2 50V
R301 100K
R308 470
R305 1.5K(F) (1%)
R304 820(1%)
R306 100K
R307 100K
R302 1.5K(1%)
R303 820(1%)
R309 10K
C303 2.2/50V
C304 2.2/50V
R310 330
S502
BASS BOOST
ON ← OFF
S502-1
TREBLE
RV501 37K
R521 1M (⅓W)
R525 3.9K
R526 220
C506 2.2/50V
C507 10P
C509 0.0068
C510 0.068
C511 0.047
C512 0.47
R522 2.2K
R523 33K
R529 8.2K
C513 0.15
R527 5.6K
RV502 24K
R528 680
BASS
DIRECT
C508 10/50V
R524 1.5K
S501-2
TONE
R530 1M
【TONE BOARD(1/2)】
S302-3 OFF → ON S302-4
S302
R330 470
EQUALIZER
S301 FUNCTION
【BALANCE BOARD(1/3)】
R716 560 (½W)
R715 100
D718 GL-2HY1
R717 220
【GEQ LED BOARD】
【VR BOARD(1/2)】
CURRENT MIRROR
2SA733×2
Q504 Q505
R503 220
R504 220
R506 27K (½W)
R505 470
C501 220P
2SC945×2
Q502 Q503
CASCODE AMP
D501 EQA01-10
BALANCE
R501 100
R502 1M
Q501 μPA68H
POWER AMP
C921 10P
47P (G·AEP)
CLASS-A CASCODE AMP
Q507 2SA733
Q508 2SA1383
R508 120
D504,503 1SS202×3
C503 47/10V
D505
CLASS-A AMP
C502 8P
CURRENT REG.
Q506 2SD666
R509 27K (1W)
R510 4.7K
C504 100/10V
R507 1K
D502 EQA01-06
D607, 506
C922 22P
2SC3514
Q509
1SS202×2
CURRENT REG.
R511 100
US MODEL
R534 22
C505 47/10V
R512 2.2K
R513 560
RT501 470
Q510 2SD809 BIAS
R516 120 (½W)
Q512 2SA985
CLASS-B DRIVER
Q511 2SC2275 CLASS-B DRIVER
R514 22
R515 22
Q513 2SC3284, 2SC3519
POWER FINAL AMP
R517 4.7 (½W)
R518 4.7 (½W)
R607 2.7K
R519 0.1 (5W)
R520 0.1 (5W)
Q514 2SA1303 2SA1386 (US)
POWER FINAL AMP
SHORT DET
Q601 2SA733
R608 22K
R532 10
L501 1μ
R531 10 (½W)
D604 1SS202
D605 1SS202
C514 0.022 0.047 (US)
C515 0.047
US MOD
R714
R713
FUNCTION LED BOARD
FUNCTION BOARD(1/2)
A
C911 0.001
G·AEP MODEL
S303-1 OFF → ON
C923 0.01
RV302 10K
R266 1.5K
EQ AMP
C257
R264 220
R259 1.5M
R260 56K(1%)
R261 4.7K(1%)
R265 100K
C255 0.056 100V(3%)
C256 0.016 100V (3%)
R262 100 (1%)
S201-2
CARTRIDGE
MC → MM
C351 0.22
RV351 100K(MN)
C352 2.2 50V
R351 100K
R358 470
R355 1.5K(1%)
R354 820(1%)
R356 100K
R357 100K
IC351 NE5532 V-1
R352 1.5k(1%)
R353 820(1%)
R359 10K
C353 2.2/50V
C354 2.2/50V
C306 22/25V
C305 22/25V
R360 330
R571 1M (⅓W)
R575 3.9K
RV551 37K
R576 220
S502-2
C556 2.2/50V
C557 10P
C559 0.0068
C560 0.068
C561 0.047
C562 0.47
R572 2.2K
R573 33K
R579 8.2K
C563 0.15
R577 5.6K
RV552 24K
R578 680
R574 1.5K
C558 10/50V
S501-1
TONE
R580 1M
【TONE BOARD(1/2)】
ATTENUATOR
S302-1
EQUALIZER
R380 470
CURRENT MIRROR
2SA733×2
Q554 Q555
R553 220
R554 220
R556 27K (½W)
R555 470
C551 220P
2SC945×2
Q552 Q553
CASCODE AMP
D551 EQA01-10
【VR BOARD(1/2)】
R551 100
R552 1M
Q551 μPA68H
POWER AMP
C971 10P
47P (G·AEP)
RV352 10k
CLASS-A CASCODE AMP
Q557 2SA733
Q558 2SA1383
R558 120
554,553 1SS202×3
D555
C553 47/10V
CLASS-A AMP
C552 8P
CURRENT REG.
Q556 2SD666
R559 27K (1W)
R560 4.7K
C554 100/10V
R557 1K
D552 EQA01-06
D557, 556
C972 22P
Q559 2SC3514
1SS202×2
R561 100
US MODEL
R584 22
C555 47/10V
R562 2.2K
R563 560
RT551 470
Q560 2SD809 BIAS
CLASS-B DRIVER
Q562 2SA985
R566 120 (½W)
Q561 2SC2275 CLASS-B DRIVER
R564 22
R565 22
Q563 2SC3284, 2SC3519
POWER FINAL AMP
R657 2.7K
R567 4.7 (½W)
R568 4.7 (½W)
R569 0.1 (5W)
R570 0.1 (5W)
Q564 2SA1303 2SA1386 (US)
POWER FINAL AMP
SHORT DET
Q651 2SA733
R658 22K
R582 10 (½W)
L551 1μ
R581 10 (½W)
D654 1SS202
D655 1SS202
C564 0.022 0.047 (US)
C565 0.047
US MODEL
S301-7-4
VIDEO 2
ON ← OFF
C961 0.001
C973 0.01
G·AEP MODEL
Q705 2SC1826
VOL. REG.
R703 1K
R708 15K(1%)
R706 8.2K(1%)
R705 4.7K
C708 22P
Q707 2SC945
VOL. REG.
Q703 2SC945 VOL. REG.
VOL. REG. Q709 2SD809
G·AEP MODEL
R751 100 (3W)
R701 100 (3W)
D701-704 30DL4×4 RECT
F801 T2.5A
GRY
C801
14.5
-14.5
49
-49
48.5
-44
0.25
0.5
-0.5
46.5
9.6

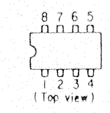

10
11
12
13
14
15
A
B
C
D
E
F
G
H
S502
BASS BOOST
ON ← OFF
S502-1
R525 3.9K
TREBLE
RV501 37K
R526 220
C509 0.0068
C510 0.068
C511 0.047
C512 0.47
R529 8.2K
C513 0.15
R527 5.6K
RV502 24K
R528 680
BASS
TREBLE
【TONE BOARD(1/2)】
Q511 2SC2275 CLASS-B DRIVER
Q513 2SC3284, 2SC3519 POWER FINAL AMP
R607 2.7K
R517 4.7(½W)
R519 0.1(5W)
R520 0.1(5W)
R532 10(½W)
49
L501 1μ
SHORT DET Q601 2SA733
R608 22K
R531 10(½W)
R518 4.7(½W)
Q514 2SA1303 2SA1386 (US)
POWER FINAL AMP
D604 1SS202
D605 1SS202
C514 0.022 0.047 (US)
C515 0.047
US MODEL
【SP SW BOARD】
RY501
R610 330K
D602 1SS202
C
S502
BASS BOOST
ON ← OFF
S502-2
R575 3.9K
RV551 37K
R576 220
C559 0.0068
C560 0.068
C561 0.047
C562 0.47
R579 8.2K
C563 0.15
R577 5.6K
RV552 24K
R578 680
TONE BOARD(1/2)】
49
Q561 2SC2275 CLASS-B DRIVER
Q563 2SC3284, 2SC3519 POWER FINAL AMP
R657 2.7K
R567 4.7(½W)
R569 0.1(5W)
R570 0.1(5W)
R582 10(½W)
L551 1μ
SHORT DET Q651 2SA733
R658 22K
R581 10(½W)
D654 1SS202
D655 1SS202
R568 4.7(½W)
Q564 2SA1303 2SA1386 (US)
POWER FINAL AMP
C564 0.022 0.047 (US)
C565 0.047
US MODEL
-49
49
-49
R712 470 (3W)
C715 220/50V
R660 330K
【PROTECT LED BOARD】
D603 GL-5NG6
R604 120 (½W)
R605 100 (½W)
3.2 STANDBY:3.4
R602 10K (½W)
R603 68K
R606 10K
IC601
IC601 μPC1237H PROTECTION CIRCUIT
0.75 STANDBY:4.2
2.1
2.6
R609 220K
C605 220/6.3V
C604 1000P
C602 0.022
R601 18K(½W)
D601 10E2
C601 4.7/25V
C603 100/6.3V
G·AEP MODEL
【SP-A BOARD(1/2)】
S503-3
R941 10 ½W
C941 0.0047
C943 33P
R943 220
TM901
SPEAKER A
OUTPUT L-CH
IMPEDANCE 6-16Ω
B ← OFF ← A ← A+B
S503 SPEAKERS
R942 10 ½W
C942 0.0047
TM902
SPEAKER B
【SP-B BOARD(1/2)】
S503-4
R533 470 (2W)
R583 470 (2W)
J501 HEADPHONES
S503-2
R991
C991 0.0047
C993 33P
R993 220
TM901
SPEAKER A
【SP-A BOARD(1/2)】
OUTPUT R-CH
IMPEDANCE 6-16Ω
B ← OFF ← A ← A+B
S503 SPEAKERS
R992
C992 0.0047
TM902
SPEAKER B
【SP-B BOARD(1/2)】
G·AEP MODEL
S503-1
【AC-SW BOARD】
F801 5.0A
S801
120
ORG
C801 0.01/400V
SWITCHED TOTAL 100W
UNSWITCHED TOTAL 100W
PT801 POWER TRANSFORMER
AC OUTLET AC120V 60Hz
AC IN
WHT
CN802
CN801
※NOT REPLACEABLE:BUILT IN TRANSFORMER
US MODEL
PT801 POWER TRANSFORMER RED240V(UK)
VIO220V(AEP)
CN801
AC OUTLET
SWITCHED 100W MAX
F801 T2.5A
S801
【AC-SW BOARD】
C801 0.01/400V
F802 T2.5A
【AC-SW BOARD】
F801 T2.5A
S801
120
GRY
C801 0.01/400V
SELCTOR POSITION 120V
EP MODEL
D701-704 30DL4 × 4 RECT


【TONE BOARD(1/2)】
BASS
TREBLE
R527 5.6K
RV502 24K
R528 680
C513 0.15
Q511 2SC2275 CLASS-B DRIVER
Q513 2SC3284, 2SC3519 POWER FINAL AMP
R607 2.7K
R517 4.7(¼W)
R519 0.1(5W)
R520 0.1(5W)
R518 4.7(½W)
Q514 2SA1303 2SA1386 (US)
POWER FINAL AMP
SHORT DET Q601 2SA733
R608 22K
D604 1SS202
D605 1SS202
R532 10(½W)
L501 1μ
R531 10(¼W)
C514 0.022 0.047 (US)
C515 0.047
US MODEL
【SP SW BOARD】
RY501
R610 330K
D602 1SS202
S503-3
C943 33P
R943 220
OUTPUT L-CH
IMPEDANCE 6-16Ω
B←OFF←A←A+B
S503 SPEAKERS
R942
C942 0.0047
10 ¼W
TM902
SPEAKER B
【SP-B BOARD(1/2)】
S503-4
R533 470(2W)
R583 470(2W)
J501 HEADPHONES
R991
C991 0.0047
TM901
SPEAKER A
S503-2
C993 33P
R993 220
【SP-A BOARD(1/2)】
OUTPUT R-CH
IMPEDANCE 6-16Ω
S503 SPEAKERS
R992
C992 0.0047
TM902
SPEAKER B
【SP-B BOARD(1/2)】
S503-1
G·AEP MODEL
S502 BASS BOOST
ON←OFF S502-2
R575 3.9K
RV551 37K
R576 220
C559 0.0068
C560 0.068
C561 0.047
C562 0.47
R579 8.2K
C563 0.15
R577 5.6K
RV552 24K
R578 680
【TONE BOARD(1/2)】
【PROTECT LED BOARD】
D603 GL-5NG6
R604 120(½W)
R605 100(½W)
3.2 STANDBY:3.4
R602 10K(½W)
R603 68K
R606 10K
IC601 μPC1237H PROTECTION CIRCUIT
0.75 STANDBY:4.2
2.1
2.6
R660 330K
R712 470(3W)
C715 220/50V
R609 220K
C605 220/6.3V
C604 1000P
C602 0.022
R601 18K(½W)
D601 10E2
C601 4.7/25V
C603 100/6.3V
Q561 2SC2275 CLASS-B DRIVER
Q563 2SC3284, 2SC3519 POWER FINAL AMP
R657 2.7K
R567 4.7(¼W)
R569 0.1(5W)
R570 0.1(5W)
R568 4.7(½W)
Q564 2SA1303 2SA1386 (US)
POWER FINAL AMP
SHORT DET Q651 2SA733
R658 22K
R582 10(½W)
L551 1μ
R581 10(¼W)
D654 1SS202
D655 1SS202
C564 0.022 0.047 (US)
C565 0.047
US MODEL
49
-49
【AC-SW BOARD】
F801 5.0A
S801
120 ORG
C801 0.01/400V
SWITCHED TOTAL 100W
UNSWITCHED TOTAL 100W
PT801 POWER TRANSFORMER
AC OUTLET AC120V 60Hz
AC IN
WHT
CN802
CN801
※NOT REPLACEABLE:BUILT IN TRANSFORMER
US MODEL
PT801 POWER TRANSFORMER RED240V(UK) VIO220V(AEP)
F801 T2.5A
S801
【AC-SW BOARD】
CN801 AC OUTLET SWITCHED 100W MAX
C801 0.01/400V
F802 T2.5A
C802 0.01/400V
AC IN
WHT
※NOT REPLACEABLE:BUILT IN TRANSFORMER.
UK,AEP MODEL
G·AEP MODEL
D701-704 30DL4×4 RECT
D703
D704
D701
D702
C702 0.01 100V
C701 0.01 100V
【AC-SW BOARD】
F801 T2.5A
S801
120 GRY
C801 0.01/400V
SWITCHED MAX 100W
CN801 AC OUTLET
UNSWITCHED MAX 100W
SELCTOR POSITION
120V
BRN
AC IN
INTERNAL CONNECTION
240V
120 ORG
100 YEL
WHT
F802 T2.5A
220V
VIO
PT801 POWER TRANSFORMER
VS801 VOLTAGE SELECTOR
※NOT REPLACEABLE:BUILT IN TRANSFORMER.
E MODEL
C
D
E
F
G
H
I
J
10
11
12
13
14
15
6

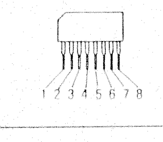

1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
I
J
K
【VR BOARD】
CN4 RED
CN3 WHT
C961
C911
G·AEP MODEL
ATTENUATOR
RV302
RV352
【FUNCTION BOARD】
CN7 WHT
CN8 RED
CN10 BLU
CN9 BLK
S301-1 PHONO
S301-2 TUNER
S301-3 CD
S301-4 TAPE
ON
OFF
【TONE BOARD】
CN18 WHT
CN20 RED
S501 TONE
DIRECT
R579
C563
S502
BASS BOOST
R529
C513
R528
C512
R578
C558
C562
C561
R577
C511
R576
R575
C560
C559
R525
C509
R526
RV552 BASS
RV502
RV551 TREBLE
RV501
R530
R580
C508
C510
R527
【BALANCE BOARD】
R714
R715
R717
R716
CN36
CN17 WHT
C301
C351
BALANCE
RV301
RV351
SUBSONIC
R330
【FUNCTION LED BOARD】
D217 VIDEO 2
D216 VIDEO 1
D215 TAPE 2
D214 TAPE 1
D213 CD
D603
【PROTECT LED BOARD】
RED
BLU
WHT
BRN
ORG
YEL
GRN

- Semiconductor Lead Layout

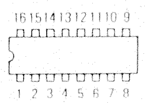
NE5532P
TL082CP
BA4560


8 7 6 5
1 2 3 4
(Top view)

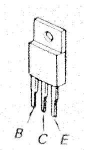
μPC1237H



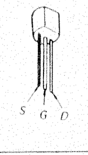
LA7220


16 15 14 13 12 11 10 9
1 2 3 4 5 6 7 8

2SA1383
2SC3514
2SA771
2SC2275
2SA985P

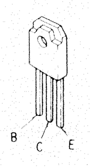


2SK246-GR2

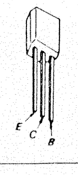


2SD1310

2SC3284
2SA1303
2SC3519Y
2SA1386Y

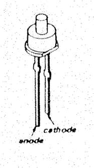


2SC2603F

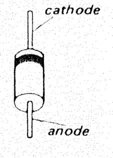


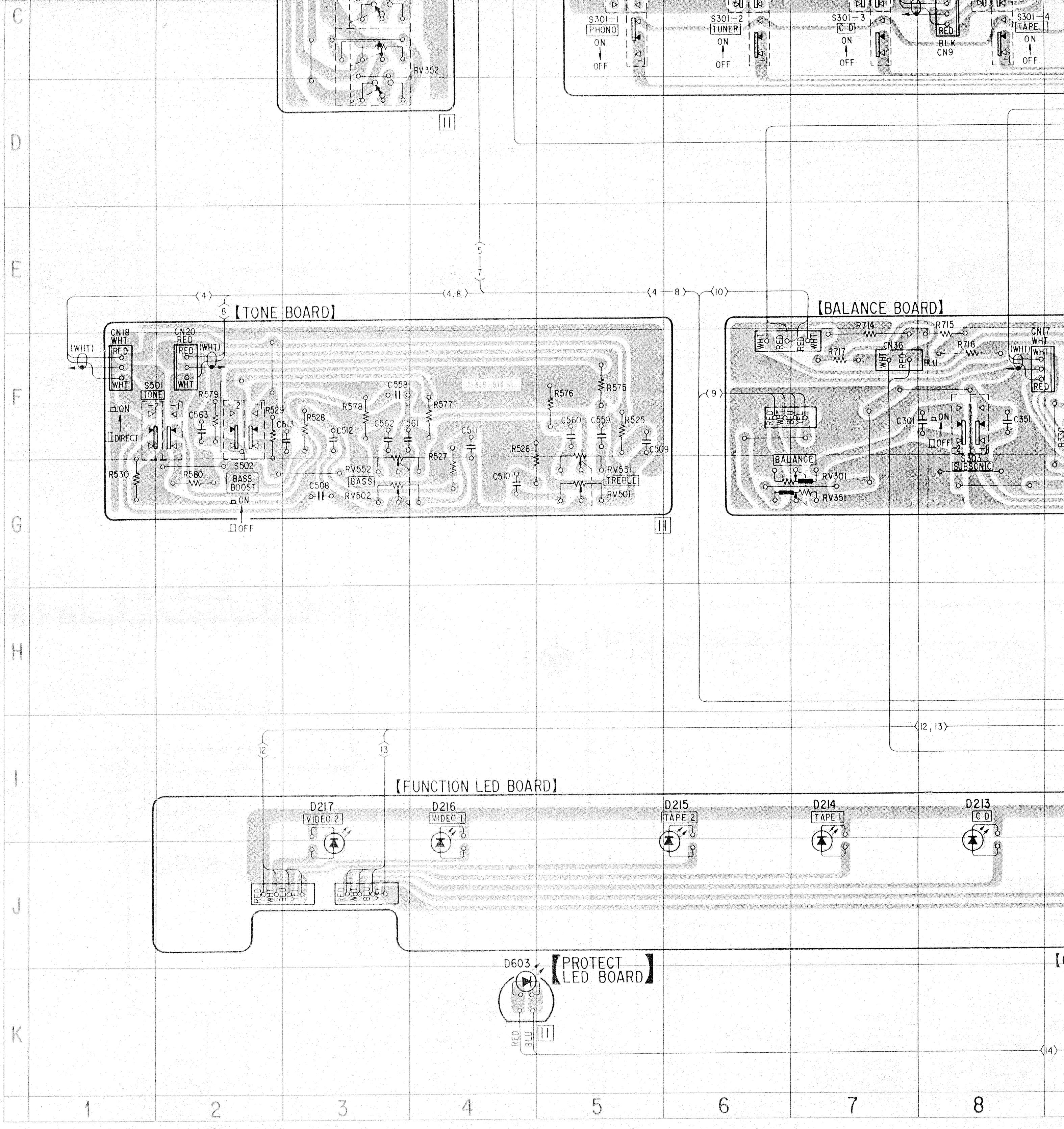
2SA1027R

GL-2HY1


cathode
anode

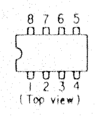
30DL4
EQA01-12R
RD10EB2
EQA01-06R2
10E-2
RD6.8EB3


cathode
anode

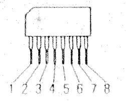

C
D
E
F
G
H
I
J
K
1
2
3
4
5
6
7
8
S301-1
PHONO
S301-2
TUNER
S301-3
C D
S301-4
TAPE
ON
OFF
BLK
CN9
RED
RV352
【TONE BOARD】
CN18
WHT
RED
CN20
(WHT)
S501
TONE
ON
DIRECT
R579
C563
R529
C513
R528
C512
R578
C558
C562
C561
R577
C511
R576
R575
C560
C559
R525
C509
R526
C510
R527
RV552
BASS
RV502
RV551
TREBLE
RV501
R530
R580
S502
BASS BOOST
C508
OFF
【BALANCE BOARD】
R714
R715
R717
R716
CN36
CN17
BLU
C301
C351
BALANCE
RV301
RV351
S303
SUBSONIC
(4)
(4,8)
(4—8)
(10)
(9)
(12, 13)
(14)
12
13
【FUNCTION LED BOARD】
D217
VIDEO 2
D216
VIDEO 1
D215
TAPE 2
D214
TAPE 1
D213
C D
D603
【PROTECT LED BOARD】
RED
BLU

- **Semiconductor Lead Layout**

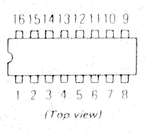
NE5532P
TL082CP
BA4560


8 7 6 5
1 2 3 4
(Top view)

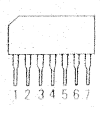
μPC1237H



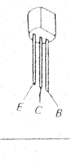
LA7220


16 15 14 13 12 11 10 9
1 2 3 4 5 6 7 8
(Top view)

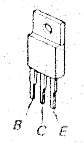
μPA68H-K



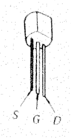
2SD666B
2SC3622A-L
2SC2545E
2SC1364



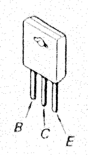
2SA1383
2SC3514
2SA771
2SC2275
2SA985P



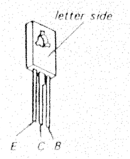
2SK246-GR2



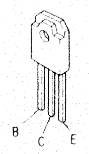
2SD1310



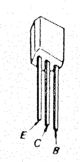
2SD809


letter side
E
C
B

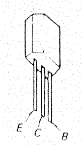
2SC3284
2SA1303
2SC3519Y
2SA1386Y



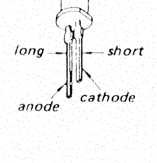
2SC2603F



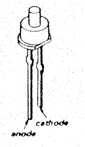
2SA1027R



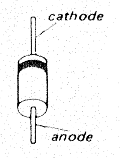
GL-5NG6


long
short
anode
cathode

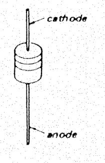
GL-2HY1

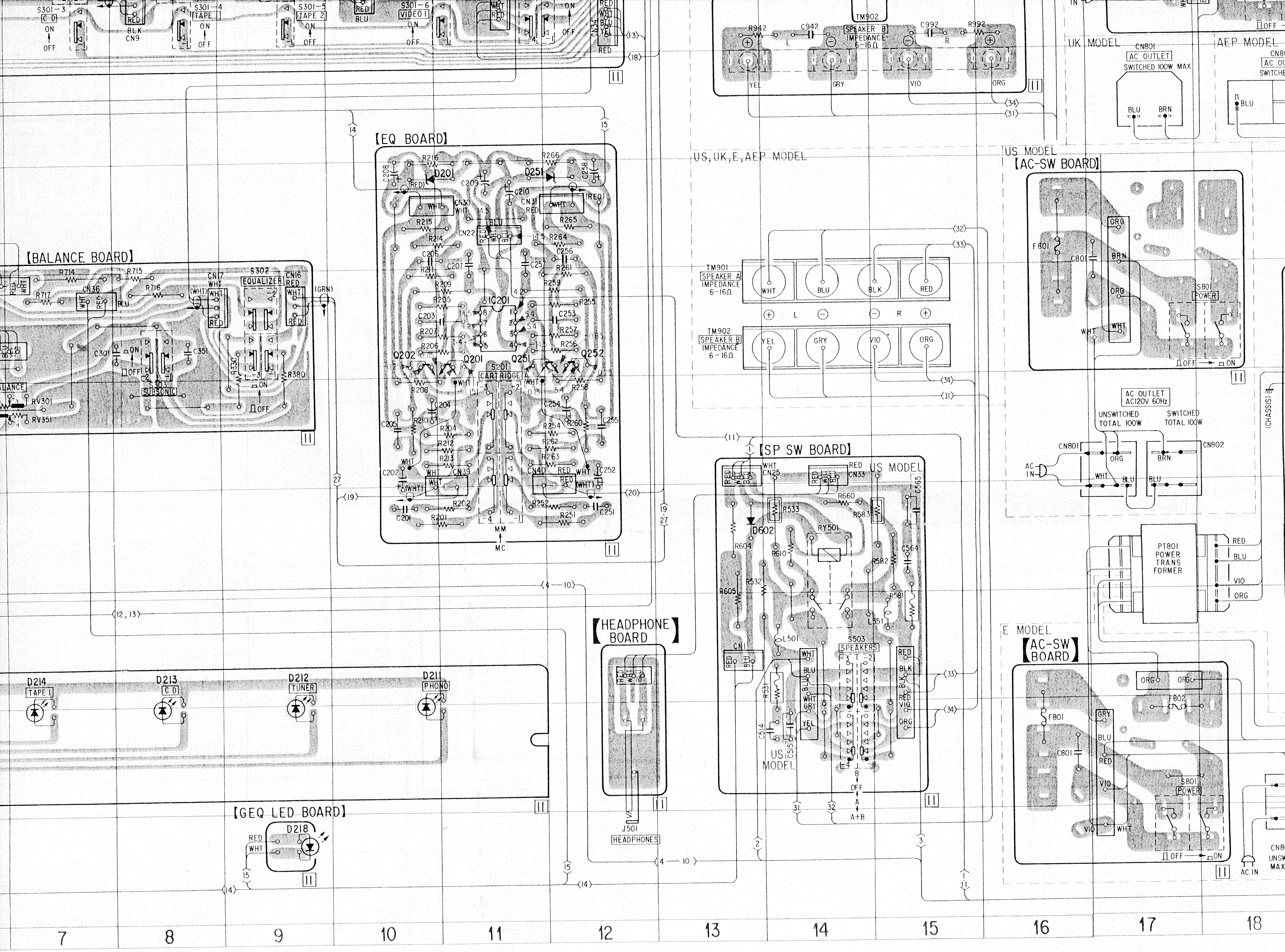

cathode
anode

30DL4
EQA01-12R
RD10EB2
EQA01-06R2
10E-2
RD6.8EB3

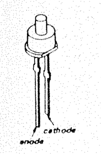

cathode
anode

1SS202-1

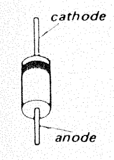

cathode
anode


S301-3
CD
ON
OFF
S301-4
TAPE 1
S301-5
TAPE 2
S301-6
VIDEO 1
CN9
TM902
SPEAKER B
IMPEDANCE 6-16Ω
R942
C942
C992
R992
YEL
GRY
VIO
ORG
UK MODEL
CN801
AC OUTLET
SWITCHED 100W MAX
AEP MODEL
BLU
BRN
US, UK, E, AEP MODEL
US MODEL
【AC-SW BOARD】
【EQ BOARD】
D201
D251
IC201
Q201
Q202
Q251
Q252
S201
CARTRIDGE
MM
MC
【BALANCE BOARD】
S302
EQUALIZER
SUBSONIC
RV301
RV351
TM901
SPEAKER A
IMPEDANCE 6-16Ω
WHT
BLU
BLK
RED
L
R
F801
C801
S801
POWER
OFF
ON
AC OUTLET
AC120V 60Hz
UNSWITCHED TOTAL 100W
SWITCHED TOTAL 100W
CN802
AC IN
(CHASSIS)
【SP SW BOARD】
US MODEL
D602
RY501
S503
SPEAKERS
OFF
A
B
A+B
PT801
POWER TRANS FORMER
【HEADPHONE BOARD】
J501
HEADPHONES
E MODEL
【AC-SW BOARD】
F802
D214
TAPE 1
D213
CD
D212
TUNER
D211
PHONO
【GEQ LED BOARD】
D218
7
8
9
10
11
12
13
14
15
16
17
18

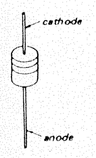
GL-2HY1


cathode
anode

30DL4
EQA01-12R
RD10EB2
EQA01-06R2
10E-2
RD6.8EB3


cathode
anode

1SS202-1

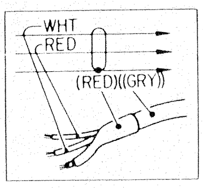

cathode
anode

- **SEMICONDUCTOR LOCATION**

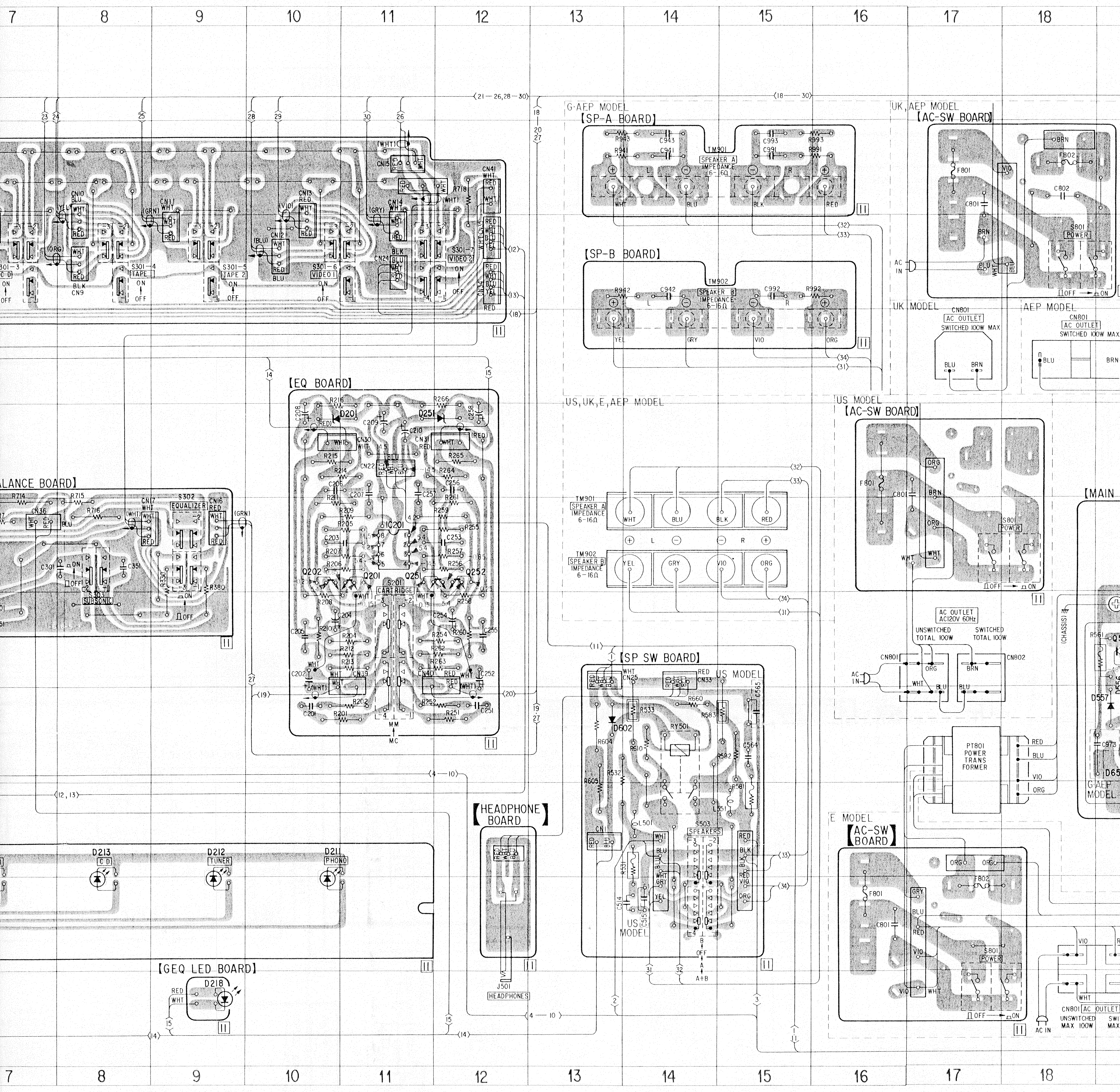
Ref.No.	Location	Ref.No.	Location
IC201	F-11	Q514	F-27
IC301	J-28	Q551	I-21
IC302	I-28	Q552	H-22
IC351	J-27	Q553	H-22
IC401	B-24	Q554	H-22
IC601	I-23	Q555	H-22
Q201	F-11	Q556	H-21
Q202	F-10	Q557	H-21
Q251	F-11	Q558	H-21
Q252	F-12	Q559	G-19
Q401	B-25	Q560	F-22
Q402	B-25	Q561	F-19
Q403	B-26	Q562	F-20
Q404	B-27	Q563	F-23
Q501	I-27	Q564	F-21
Q502	H-26	Q601	G-27
Q503	H-26	Q651	G-20
Q504	H-26	Q701	J-23
Q505	H-26	Q702	J-23
Q506	H-26	Q703	J-23
Q507	H-27	Q704	J-23
Q508	H-27	Q705	J-24
Q509	G-29	Q706	J-24
Q510	F-25	Q707	J-24
Q511	F-28	Q708	J-24
Q512	F-28	Q709	B-28
Q513	F-25		

Note:

- Color code of sleeving over the end of


WHT
RED
(RED)((GRY))

- ○—— : parts extracted from the comp
- ●—— : parts extracted from the cond


7
8
9
10
11
12
13
14
15
16
17
18
G·AEP MODEL
【SP-A BOARD】
TM901
SPEAKER A
IMPEDANCE 6–16Ω
【SP-B BOARD】
TM902
SPEAKER B
IMPEDANCE 6–16Ω
UK, AEP MODEL
【AC-SW BOARD】
F801
F802
C801
C802
S801
POWER
AC IN
UK MODEL
CN801
AC OUTLET
SWITCHED 100W MAX
AEP MODEL
CN801
AC OUTLET
SWITCHED 100W MAX
S301-3
S301-4
TAPE
S301-5
TAPE 2
S301-6
VIDEO 1
S301-7
VIDEO 2
ON
OFF
【EQ BOARD】
IC201
Q201
Q202
Q251
Q252
D201
S201
CARTRIDGE
MM
MC
BALANCE BOARD】
S302
EQUALIZER
S303
SUBSONIC
US, UK, E, AEP MODEL
US MODEL
【AC-SW BOARD】
AC OUTLET
AC120V 60Hz
UNSWITCHED TOTAL 100W
SWITCHED TOTAL 100W
CN801
CN802
【MAIN
(CHASSIS)
【SP SW BOARD】
US MODEL
RY501
D602
S503
SPEAKERS
OFF
A
B
A+B
PT801
POWER TRANSFORMER
G·AEP MODEL
【HEADPHONE BOARD】
J501
HEADPHONES
D213
CD
D212
TUNER
D211
PHONO
【GEQ LED BOARD】
D218
E MODEL
【AC-SW BOARD】
CN801
AC OUTLET
UNSWITCHED MAX 100W
AC IN

1

-12R
B2
-06R2

EB3
athode

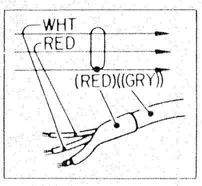
node

- **SEMICONDUCTOR LOCATION**

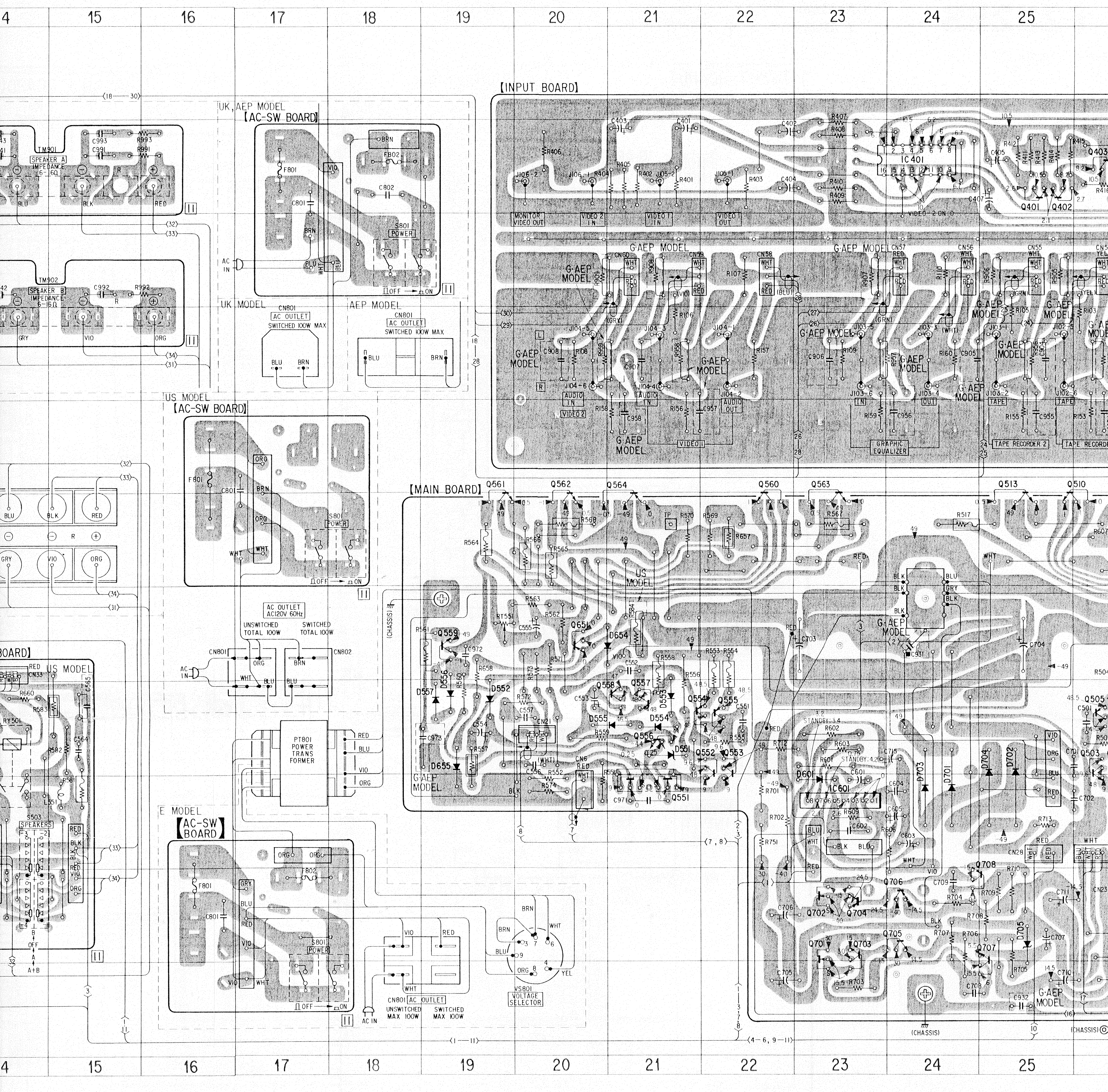
Ref.No.	Location	Ref.No.	Location
IC201	F-11	Q514	F-27
IC301	J-28	Q551	I-21
IC302	I-28	Q552	H-22
IC351	J-27	Q553	H-22
IC401	B-24	Q554	H-22
IC601	I-23	Q555	H-22
Q201	F-11	Q556	H-21
Q202	F-10	Q557	H-21
Q251	F-11	Q558	H-21
Q252	F-12	Q559	G-19
Q401	B-25	Q560	F-22
Q402	B-25	Q561	F-19

Note:

- Color code of sleeving over the end of the jacket.

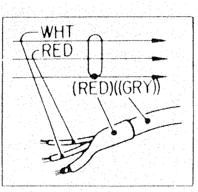

WHT
RED
(RED)((GRY))

- ○—— : parts extracted from the component side
- ●—— : parts extracted from the conductor side.

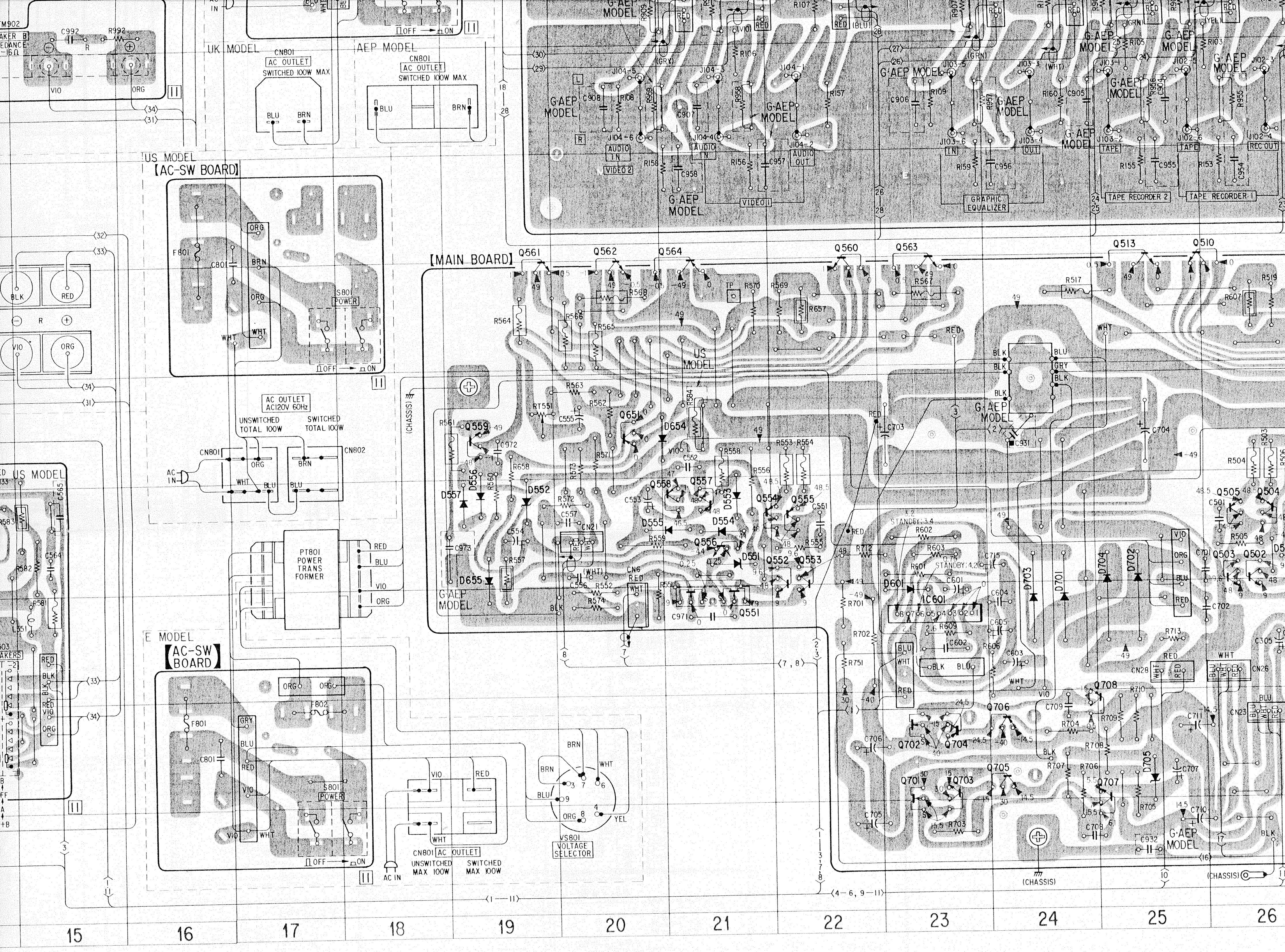

14
15
16
17
18
19
20
21
22
23
24
25
UK, AEP MODEL
【AC-SW BOARD】
【INPUT BOARD】
【MAIN BOARD】
US MODEL
【AC-SW BOARD】
E MODEL
【AC-SW BOARD】
UK MODEL
AEP MODEL
CN801
AC OUTLET
SWITCHED 100W MAX
AC OUTLET
AC120V 60Hz
UNSWITCHED TOTAL 100W
SWITCHED TOTAL 100W
PT801
POWER TRANS FORMER
VS801
VOLTAGE SELECTOR
CN801 AC OUTLET
UNSWITCHED MAX 100W
SWITCHED MAX 100W
AC IN
S801
POWER
F801
F802
C801
C802
TM901
SPEAKER A
IMPEDANCE 6-16Ω
TM902
SPEAKER B
IMPEDANCE 6-16Ω
S503
SPEAKERS
US MODEL
RY501
L551
IC401
IC601
MONITOR VIDEO OUT
VIDEO 2 IN
VIDEO 1 IN
VIDEO OUT
AUDIO IN
AUDIO OUT
VIDEO 2
VIDEO 1
GRAPHIC EQUALIZER
TAPE RECORDER 2
TAPE
G·AEP MODEL
Q401
Q402
Q403
Q510
Q513
Q551
Q552
Q553
Q554
Q555
Q556
Q557
Q558
Q559
Q560
Q561
Q562
Q563
Q564
Q651
Q505
Q503
Q701
Q702
Q703
Q704
Q705
Q706
Q707
Q708
D551
D552
D553
D554
D555
D556
D557
D601
D654
D655
D701
D702
D703
D704
D705
STANDBY: 3.4
STANDBY: 4.2
(CHASSIS)
BLU
BRN
BLK
RED
GRY
VIO
ORG
WHT
YEL
OFF
ON
A
B
A+B
(1—11)
(4—6, 9—11)
(7, 8)
(18—30)

Note:

- Color code of sleeving over the end of the jacket.

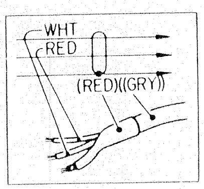

WHT
RED
(RED)((GRY))

- ○—— : parts extracted from the component side.
- ●—— : parts extracted from the conductor side.

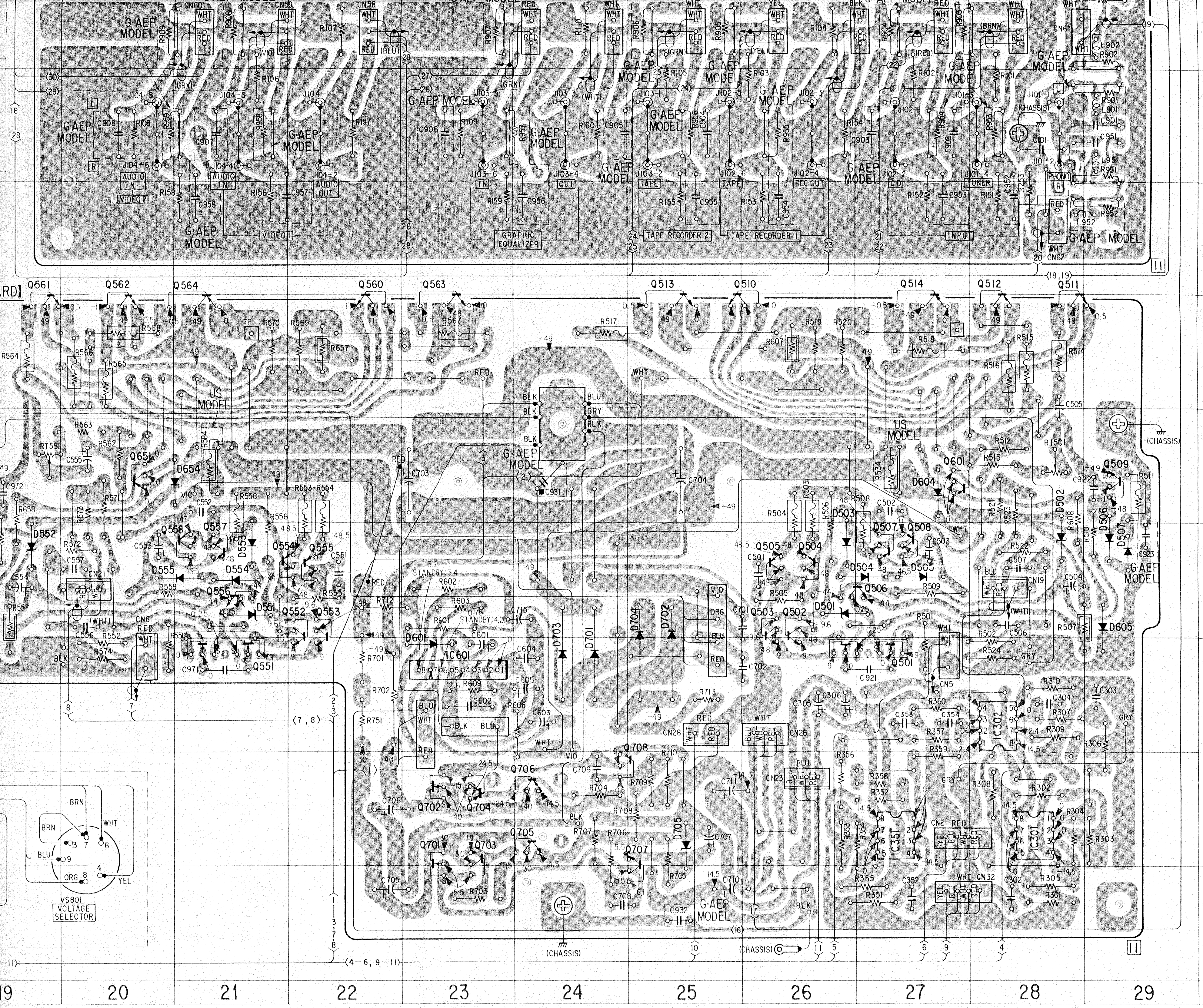

UK MODEL
CN801
AC OUTLET
SWITCHED 100W MAX
AEP MODEL
US MODEL
【AC-SW BOARD】
S801 POWER
AC OUTLET AC120V 60Hz
UNSWITCHED TOTAL 100W
SWITCHED TOTAL 100W
CN802
AC IN
PT801 POWER TRANS FORMER
E MODEL
【AC-SW BOARD】
F801
F802
C801
VS801 VOLTAGE SELECTOR
UNSWITCHED MAX 100W
SWITCHED MAX 100W
【MAIN BOARD】
Q561
Q562
Q564
Q560
Q563
Q513
Q510
Q559
Q651
D654
Q558
Q557
D553
Q554
Q555
D555
D554
Q556
D551
Q552
Q553
Q551
D557
D556
D552
D655
CN21
CN6
IC601
D601
D703
D701
D704
D702
Q708
Q706
Q702
Q704
Q705
Q701
Q703
Q707
D705
Q505
Q504
Q503
Q502
CN28
CN26
CN23
G·AEP MODEL
US MODEL
(CHASSIS)
STANDBY
GRAPHIC EQUALIZER
TAPE RECORDER 2
TAPE RECORDER 1
VIDEO 2
VIDEO 1
AUDIO IN
AUDIO OUT
TAPE
REC OUT
SPEAKERS
IMPEDANCE
15
16
17
18
19
20
21
22
23
24
25
26

Note:

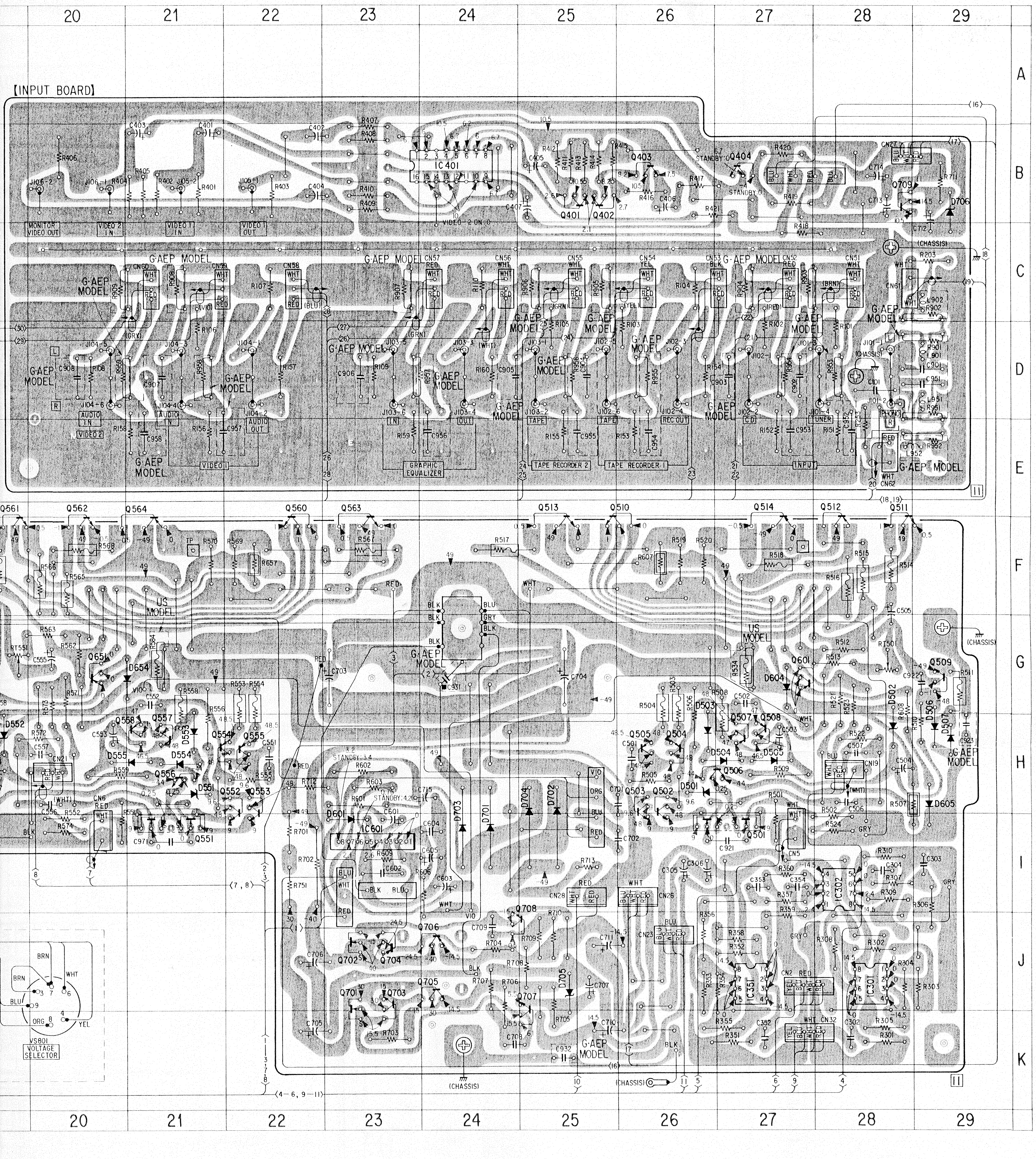
- Color code of sleeving over the end of the jacket.


WHT
RED
(RED)
(GRY)

- ○— : parts extracted from the component side.
- ●— : parts extracted from the conductor side.


G·AEP MODEL
US MODEL
AUDIO IN VIDEO 2
AUDIO IN
AUDIO OUT
VIDEO II
GRAPHIC EQUALIZER
TAPE RECORDER 2
TAPE RECORDER 1
TAPE
REC OUT
CD
TUNER
PHONO
INPUT
STANDBY
IC601
IC301
IC302
IC351
VS801 VOLTAGE SELECTOR
(CHASSIS)
C
D
E
F
G
H
I
J
K
19
20
21
22
23
24
25
26
27
28
29

English
85K0681-1
Printed in Japan
©1985


【INPUT BOARD】
20
21
22
23
24
25
26
27
28
29
A
B
C
D
E
F
G
H
I
J
K
IC401
Q401
Q402
Q403
Q404
MONITOR VIDEO OUT
VIDEO 2 IN
VIDEO 1 IN
VIDEO OUT
VIDEO 2 ON:0
STANDBY:0
G·AEP MODEL
AUDIO IN
VIDEO 2
AUDIO IN
AUDIO OUT
VIDEO 1
IN
OUT
GRAPHIC EQUALIZER
TAPE
TAPE RECORDER 2
TAPE
REC OUT
TAPE RECORDER 1
CD
INPUT
TUNER
PHONO
(CHASSIS)
US MODEL
IC601
IC301
IC302
IC351
STANDBY:4.2
BRN
WHT
BLU
ORG
YEL
VS801 VOLTAGE SELECTOR
(CHASSIS)

137

TA-F222ES

SERVICE MANUAL

US Model
AEP Model
UK Model
E Model

PRELIMINARY

SONY
AUDIO CURRENT TRANSFER
TA-F222ES

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

US model

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
With 8-ohm loads, both channels driven, from 20 - 20,000 Hz; rated 80 watts per channel minimum RMS power, with no more than 0.006% total harmonic distortion from 250 milliwatts to rated output.

OTHER SPECIFICATIONS

Amplifier section

Continuous RMS power output
(both channels driven simultaneously)
AEP, UK, E model
At 20 Hz - 20 kHz
80 + 80 watts (0.006% THD, 8 ohms)
At 1 kHz
100 + 100 watts (0.006% THD, 6 ohms)
US model
At 20 Hz - 20 kHz
80 + 80 watts (0.006% THD, 8 ohms)

Power bandwidth (IHF)
10 Hz - 80 kHz

Dynamic headroom
1.2 dB ('78 IHF)

Harmonic distortion
Less than 0.005 % at 10 watts (6 ohms)
Less than 0.004 % at 10 watts (8 ohms)

Intermodulation (IM) distortion
(60 Hz : 7 kHz = 4 : 1) Less than 0.006 % at rated output (6 ohms)
Less than 0.006 % at rated output (8 ohms)

– Continued on page 2 –

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

MICROFILM

INTEGRATED STEREO AMPLIFIER

SONY®

AUD

1374

Slew rate	125 V/μ sec. 250 V/μ sec. (inside)
Dynamic range	TUNER, CD, TAPE 1,2, VIDEO 1,2 : 120dB
Channel separation (at 1 kHz)	PHONO MC : 80 dB MM : 95 dB TUNER, CD, TAPE 1,2, VIDEO 1,2 : 100dB
Frequency response	PHONO : RIAA equalization curve ±0.2 dB TUNER, CD, TAPE 1,2, VIDEO 1,2 (audio) : 5 Hz - 200 kHz $^{+0}_{-3}$ dB
Residual noise	Less than 25 μV (8 ohms, network A)
Damping factor	125 (8 ohms, 1 kHz)

Inputs

	Setting of the CARTRIDGE load selector	Sensitivity	Impedance	Maximum input capability (1 kHz)	S/N (weighting network, input level)
PHONO	MM	2.5 mV	50 kilohms	150 mV	87 dB 83 dB* (A, 2.5 mV)
	MC	0.17 mV	100 ohms	9 mV	68 dB 71 dB* (A, 170 μV)
TUNER, CD TAPE 1, 2 VIDEO 1,2 (audio)		150 mV	50 kilohms		97 dB 102 dB* (A, 150 mV)

* '78 IHF

VIDEO 1,2
  Voltage 1 Vp-p
  Impedance 75 ohms

Outputs	REC OUT 1 Voltage 150 mV Impedance 1 kilohms SPEAKER A, B Accepts speakers of 6 - 16 ohms. HEADPHONES Accepts low and high impedance headphones. VIDEO 1 OUT (audio) 150 mV 1 kilohms VIDEO 1 OUT 1 Vp-p 75 ohms
Tone controls	BASS ±8 dB at 60 Hz (turnover freq. 300 Hz) TREBLE ±6 dB at 10 kHz (turnover freq. 5 kHz)
Bass boost	+ 5 dB at 50 Hz
Subsonic filter	6 dB/octave attenuation below 15 Hz

General

System	Integrated stereo amplifier Power amplifier section Legato linear, pure-complementary, Darlington OCL SEPP amplifier Preamplifier section Equalizer section : Low-noise equalizer amp (MC or MM cartridge load selectable) Audio Current Transfer section : Bridge-balance type voltage-to-current converter with dc servo amp
Power requirements	AEP model: 220 V ac, 50/60 Hz UK model: 240 V ac, 50 Hz US model: 120 V ac, 60 Hz E model: 120, 220, or 240 V ac adjustable, 50/60 Hz
Power consumption	AEP, UK, E model: 200 W US model: 250 W
AC outlets	AEP, UK model: 1 switched, 100 watts max. US model: 2 switched, total 100 watts max. 2 unswitched, total 100 watts max. E model: 1 switched, 100 watts max. 1 unswitched 100 watts max.
Dimensions	Approx. 430 x 130 x 375 mm (w/h/d) (17 x 5 1/8 x 14 7/8 inches) including projecting parts and controls
Weight	AEP, UK, E model: Approx. 11.5 kg (25 lbs 6 oz) net Approx. 13 kg (28 lbs 11 oz) in shipping carton US model: Approx. 12.1 kg (26 lbs 11 oz) net Approx. 13.6 kg (30 lbs) in shipping carton

EXPLODED VIEWS AND PARTS LIST

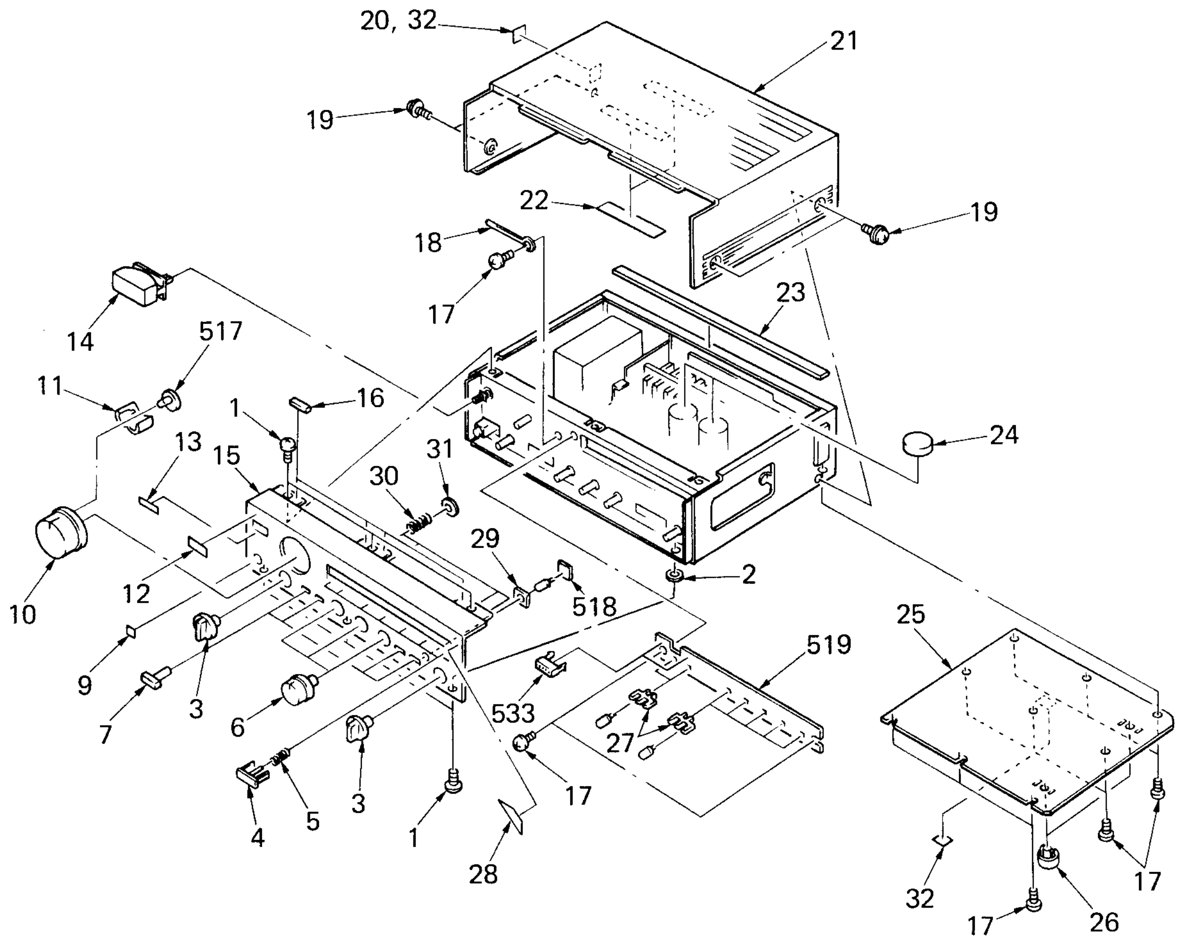
NOTE:

The mechanical parts with no reference number in the exploded views are not supplied.

- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

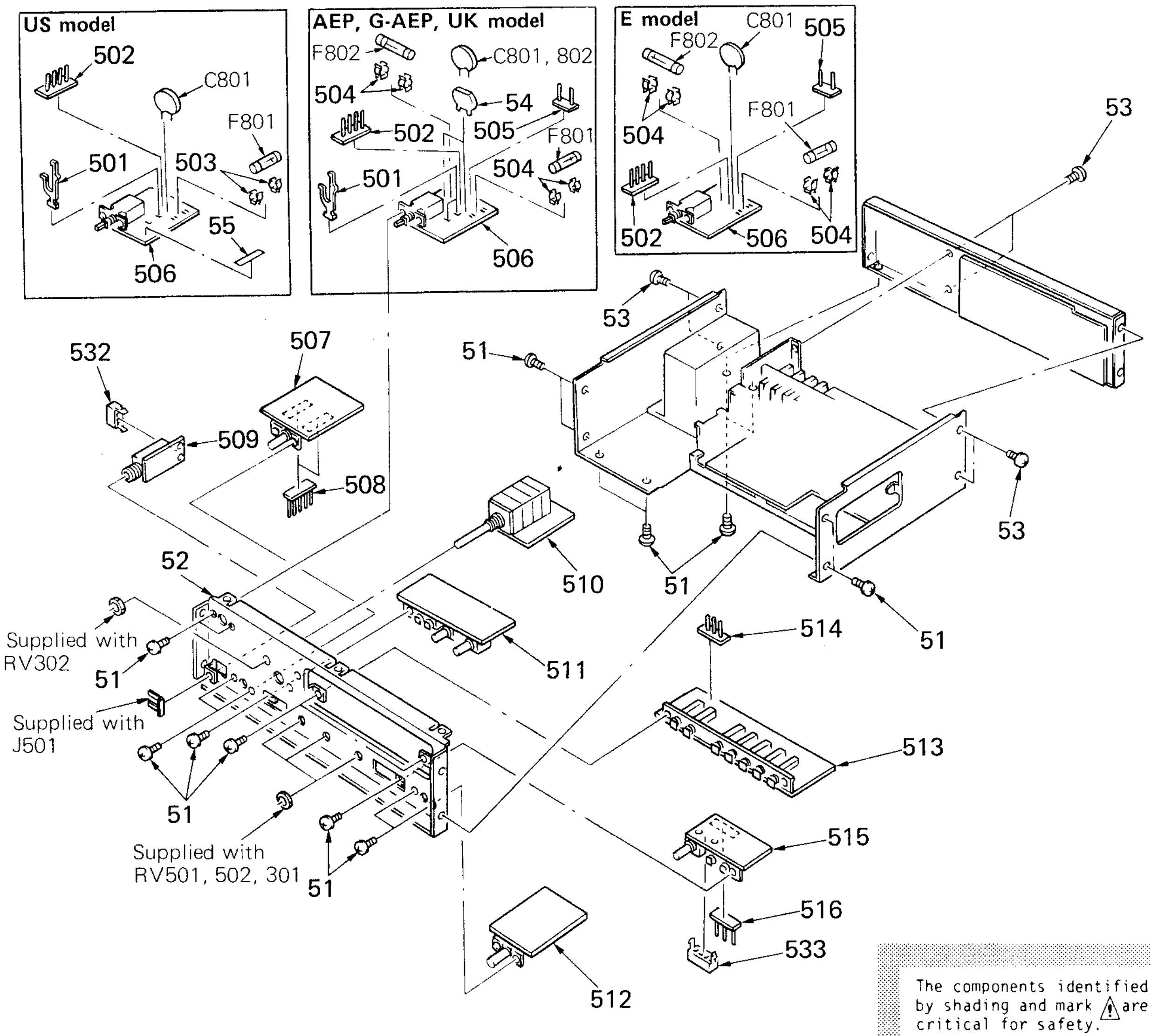
The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

(1).



No.	Part No.	Description	Remarks
1	7-685-751-09	SCREW +BVTT 3X6 (S)	
2	4-402-063-11	SHEET, INSULATING	
3	4-908-838-01	KNOB, SQUARE	
4	4-908-836-01	KNOB, PUSH	
5	2-267-020-00	SPRING, COMPRESSION	
6	4-908-839-01	KNOB, ROUND	
7	4-885-956-01	KNOB, PUSH	
9	3-703-710-41	STICKER, SONY SYMBOL (12)	
10	X-4885-908-1	KNOB (NA-50) ASSY, R	
11	*4-901-919-00	HOUSE, LED LAMP	
12	*3-701-690-00	(UK)....LABEL (MADE IN JAPAN)	
13	3-304-974-01	EMBLEM, SONY	
14	X-4885-901-0	KNOB ASSY, POWER	
15	X-4885-915-1	PANEL ASSY	
16	9-911-845-XX	CUSHION, COUNTER	
17	7-685-871-01	SCREW +BVTT 3X6 (S)	
18	*3-701-822-00	HOLDER, WIRE	
19	4-889-321-11	SCREW	
20	3-703-079-21	(UK)...LABEL, CAUTION (BACK)	
21	4-885-927-21	CASE	
22	*4-885-983-11	SHEET	
23	*4-848-642-00	CUSHION, VIBRATION	
24	*4-908-834-01	CUSHION	
25	*4-885-922-02	PLATE, BOTTOM	
26	X-4864-303-0	FOOT ASSY	
27	*4-905-210-01	HOLDER, LED	
28	4-889-813-21	STICKER (C)	
29	*4-908-835-01	BRACKET, LED	
30	4-866-652-00	SPRING, COMPRESSION	
31	4-862-338-00	RING, STOPPER	
32	*3-703-680-00	(US)...LABEL, CAUTION, SUB, NEW UL	
517	*1-616-514-11	PC BOARD, PROTECT LED	
518	*1-616-519-11	PC BOARD, GEQ LED	
519	*1-616-518-11	PC BOARD, FUNCTION LED	
533	*1-562-249-00	SOCKET, CONNECTOR 4P	

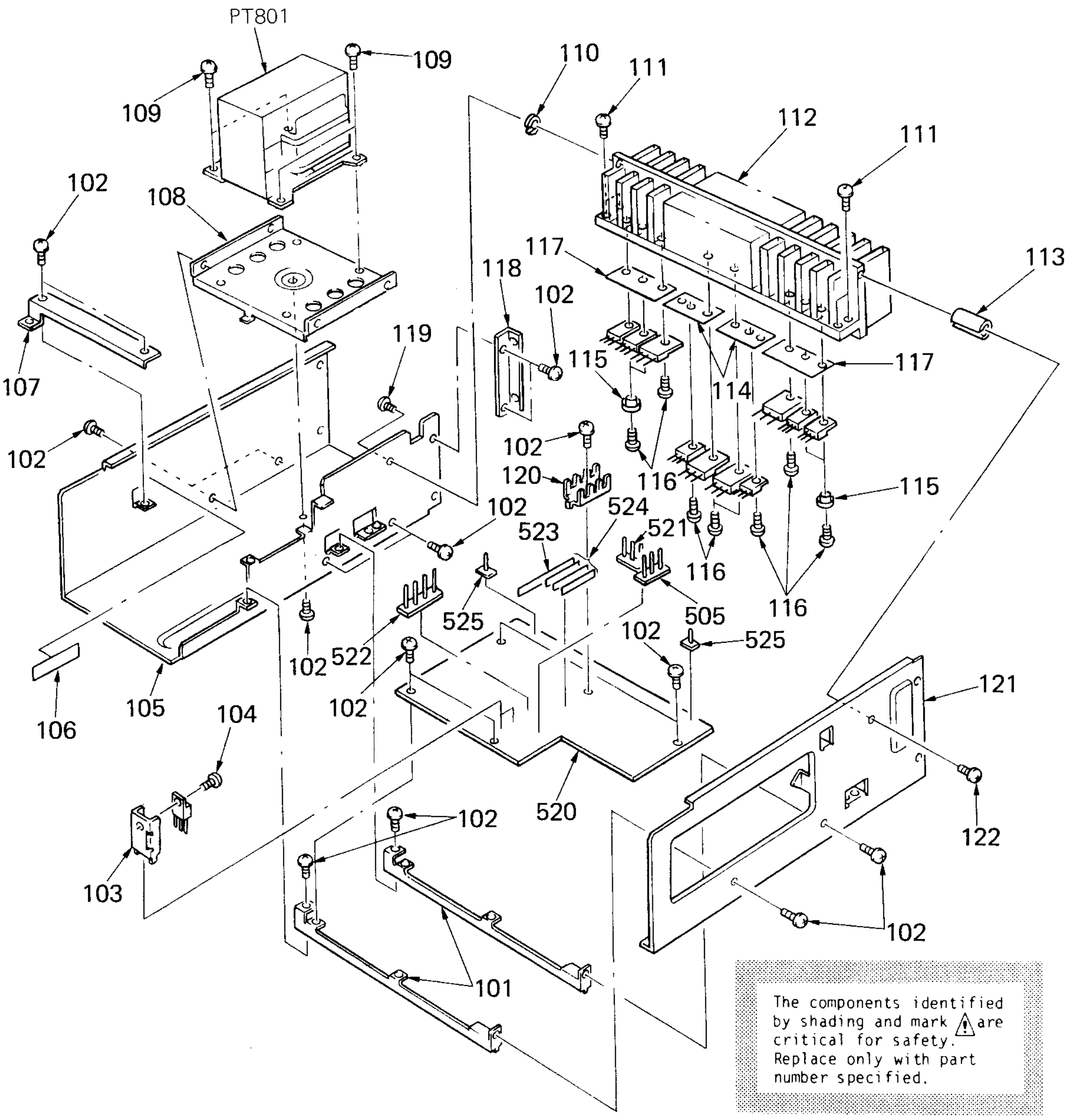
(2).


US model
502
C801
F801
501
503
55
506
AEP, G-AEP, UK model
F802
C801, 802
504
54
502
505
F801
501
504
506
E model
C801
505
F802
F801
504
502
506
504
53
53
51
532
507
509
508
52
510
51
53
Supplied with
RV302
51
Supplied with
J501
51
511
514
51
513
Supplied with
RV501, 502, 301
51
515
516
533
512

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

No.	Part No.	Description	Remarks
51	7-685-871-01	SCREW +BVTT 3X6 (S)	
52	*4-908-840-01	CHASSIS, SUB	
53	7-685-751-09	SCREW +BVTT 3X6 (S)	
54	4-875-455-01	(AEP,G-AEP,UK)...COVER (DIA.20), CAPACITOR	
55	3-701-946-21	(US)....LABEL, FUSE	
501	1-535-416-00	(US,AEP,G-AEP,UK)...TERMINAL	
502	*1-535-141-00	BASE POST 22MM (10MM PITCH) 4P	
503	1-533-185-11	(US)......HOLDER, FUSE	
504	1-533-183-11	(AEP,G-AEP,UK,E)...HOLDER, FUSE	
505	*1-535-139-00	BASE POST 22MM (10MM PITCH) 2P	
506	*1-616-509-11	PC BOARD, AC-SW	
507	*1-616-506-11	PC BOARD, SP CHANGE	
508	*1-535-118-00	TERMINAL	
509	*1-616-517-11	PC BOARD, H.P.	
510	*1-616-515-11	PC BOARD, VR	
511	*1-616-516-12	PC BOARD, TONE	
512	*1-616-511-11	PC BOARD, EQ	
513	*1-616-512-12	PC BOARD, FUNCTION	
514	*1-508-810-00	14MM BASE POST	
515	*1-616-513-11	PC BOARD, BALANCE	
516	*1-535-116-00	TERMINAL	
532	*1-562-327-00	SOCKET, CONNECTOR 3P	
533	*1-562-249-00	SOCKET, CONNECTOR 4P	
F801 ⚠	.1-532-272-XX	(US).....FUSE 5.0A	
F801 ⚠	.1-532-286-00	(AEP,G-AEP,UK,E)...FUSE 2.5A TIME-LAG	
F802 ⚠	.1-532-286-00	(AEP,G-AEP,UK,E)...FUSE 2.5A TIME-LAG	

(3).


PT801
109
109
110
111
112
111
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102
116
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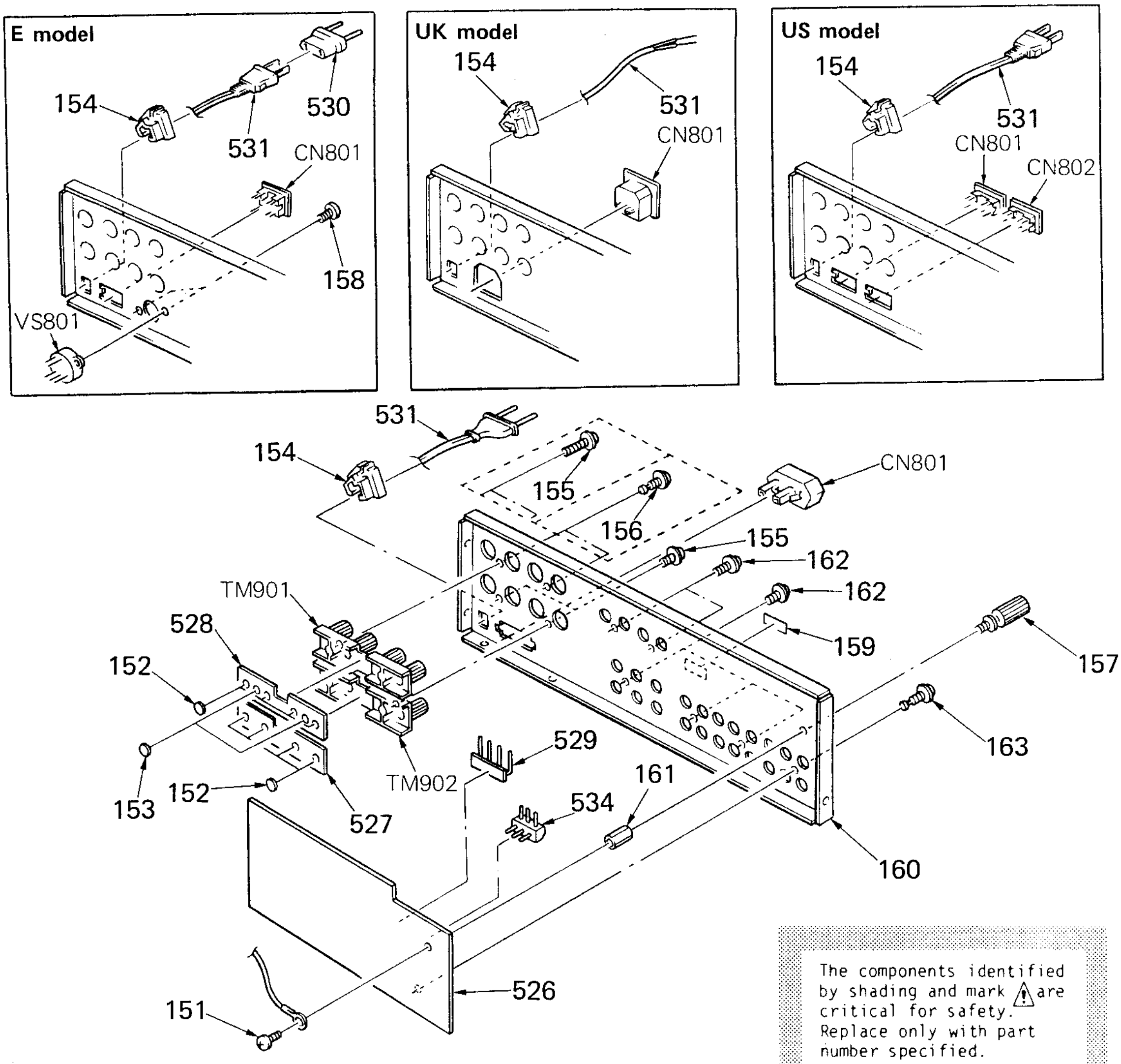
122
103
102
101
102

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

No.	Part No.	Description	Remarks
101	*4-889-824-00	CHANNEL	
102	7-685-871-01	SCREW +BVTT 3X6 (S)	
103	*3-309-144-01	HEAT SINK	
104	2-259-121-11	SCREW, TR	
105	*4-889-829-00	PLATE, SIDE, LEFT	
106	*3-703-044-26	(US)....LABEL, CAUTION	
107	*4-885-980-01	REINFORCEMENT	
108	*4-885-916-00	BRACKET, TRANSFORMER	
109	7-685-881-01	SCREW +BVTT 4X8 (S)	
110	4-908-811-01	SPACER	
111	7-685-876-01	SCREW +BVTT 3X16 (S)	
112	*4-885-998-11	HEAT SINK	
113	4-908-809-01	SPACER	
114	*4-885-995-01	SHEET, INSULATING	
115	2-371-561-00	BUSHING (P), INSULATING	
116	2-259-121-21	SCREW, TR	
117	*4-908-815-01	SHEET, INSULATING	
118	*4-889-819-00	BRACKET	
119	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
120	*4-880-404-01	(AEP,G-AEP,UK,E).......PLATE, GROUND	
	*4-880-404-11	(US)....PLATE, GROUND, CONCENTRATION	
121	*4-889-826-00	PLATE, SIDE, RIGHT	
122	7-685-649-19	SCREW +BVTP 3X14 TYPE2 N-S	
505	*1-535-139-00	BASE POST 22MM (10MM PITCH) 2P	
520	*A-4388-480-A	(US).........MOUNTED PCB, MAIN	
	*A-4388-481-A	(AEP,UK,E)...MOUNTED PCB, MAIN	
	*A-4388-482-A	(G-AEP)......MOUNTED PCB, MAIN	
521	*1-535-115-00	TERMINAL	
522	*1-535-117-00	TERMINAL	
523	*1-560-242-11	BUS BAR 3P	
524	*1-560-242-61	BUS BAR 2P	
525	*1-535-114-00	TERMINAL	
PT801⚠	1-448-173-11	(US)..........TRANSFORMER, POWER	
PT801⚠	1-448-264-11	(UK)..........TRANSFORMER, POWER	
PT801⚠	1-448-265-11	(E)...........TRANSFORMER, POWER	
PT801⚠	1-448-266-11	(AEP,G-AEP)...TRANSFORMER, POWER	

(4).


E model
154
530
531
CN801
158
VS801
UK model
154
531
CN801
US model
154
531
CN801
CN802
531
154
155
156
CN801
155
162
162
TM901
528
159
157
152
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529
161
153
152
TM902
534
527
160
151
526

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

No.	Part No.	Description	Remarks
151	7-685-871-01	SCREW +BVTT 3X6 (S)	
152	*4-843-416-11	(G-AEP)...PLATE, FIXED, CAP	
153	*4-908-843-01	(G-AEP)...PLATE	
154	3-703-244-00	(US,AEP,G-AEP,UK)....BUSHING (2104), CORD	
	3-703-571-00	(E)...............BUSHING (S)(4516), CORD	
155	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
156	3-703-473-00	(G-AEP)...SCREW, TERMINAL	
157	X-4854-207-0	TERMINAL ASSY, GROUND	
158	7-685-751-09	SCREW +BVTT 3X6 (S)	
159	*4-908-827-01	(US)......LABEL, MODEL NUMBER (U2)	
	*4-908-828-01	(E).......LABEL, MODEL NUMBER (E2/3)	
	*4-908-829-01	(AEP).....LABEL, MODEL NUMBER (AE1)	
	*4-908-830-01	(G-AEP)...LABEL, MODEL NUMBER (AE4)	
	*4-908-831-01	(UK)......LABEL, MODEL NUMBER (UK1)	
160	*4-908-842-11	(US)..........PLATE, JACK	
	*4-908-842-21	(AEP,G-AEP)...PLATE, JACK	
	*4-908-842-31	(UK)..........PLATE, JACK	
	*4-908-842-41	(E)...........PLATE, JACK	
161	*2-280-622-41	SUPPORT (M3), HEXAGON	
162	3-701-589-21	SCREW, SELF-TAPPING	

No.	Part No.	Description	Remarks
163	4-887-711-21	SCREW, TERMINAL, CLAW, +BVTP	
526	*1-616-505-12	PC BOARD, INPUT	
527	*1-616-507-11	(G-AEP)...PC BOARD, SP-B	
528	*1-616-508-11	(G-AEP)...PC BOARD, SP-A	
529	*1-508-831-12	H TYPE BASE POST	
530	⚠1-526-565-00	(E)....AC PLUG ADAPTOR	
531	⚠1-551-884-00	(UK)..........CORD, POWER	
	⚠1-555-795-00	(AEP,G-AEP)...CORD, POWER	
	⚠1-556-091-00	(E)...........CORD, POWER	
	⚠1-557-577-11	(US)..........CORD, POWER	
534	*1-508-878-00	BASE POST	
CN801	⚠1-526-695-00	(E)...........OUTLET, AC (2 GANG)	
CN801	⚠1-526-751-00	(UK)..........OUTLET, AC	
CN801	⚠1-526-794-11	(AEP,G-AEP)...OUTLET, AC	
CN801	⚠1-526-883-00	(US)..........OUTLET, AC	
CN802	⚠1-526-883-00	(US)..........OUTLET, AC	
TM901	1-536-767-00	TERMINAL BOARD, SPEAKER	
TM902	1-536-767-00	TERMINAL BOARD, SPEAKER	
VS801	⚠1-526-576-31	(E)...SELECTOR, POWER VOLTAGE	

ELECTRICAL PARTS LIST

NOTE:

- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuitsin a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF:µF, PF:µµF.

RESISTORS
- All resistors are in ohms.
- F : nonflammable

COILS
- MMH : mH, UH : µH

SEMICONDUCTORS
In each case, U : µ, for example:
UA...: µA..., UPA...: µPA..., UPC...: µPC, UPD...: µPD...

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
501	1-535-416-00	(US,AEP,G-AEP,UK)...TERMINAL			
502	*1-535-141-00	BASE POST 22MM (10MM PITCH) 4P			
503	1-533-185-11	(US)......HOLDER, FUSE			
504	1-533-183-11	(AEP,G-AEP,UK,E)...HOLDER, FUSE			
505	*1-535-139-00	BASE POST 22MM (10MM PITCH) 2P			
506	*1-616-509-11	PC BOARD, AC-SW			
507	*1-616-506-11	PC BOARD, SP CHANGE			
508	*1-535-118-00	TERMINAL			
509	*1-616-517-11	PC BOARD, H.P.			
510	*1-616-515-11	PC BOARD, VR			
511	*1-616-516-12	PC BOARD, TONE			
512	*1-616-511-11	PC BOARD, EQ			
513	*1-616-512-12	PC BOARD, FUNCTION			
514	*1-508-810-00	14MM BASE POST			
515	*1-616-513-11	PC BOARD, BALANCE			
516	*1-535-116-00	TERMINAL			
517	*1-616-514-11	PC BOARD, PROTECT LED			
518	*1-616-519-11	PC BOARD, GEQ LED			
519	*1-616-518-11	PC BOARD, FUNCTION LED			
520	*A-4388-480-A	(US).........MOUNTED PCB, MAIN			
	*A-4388-481-A	(AEP,UK,E)...MOUNTED PCB, MAIN			
	*A-4388-482-A	(G-AEP)......MOUNTED PCB, MAIN			
521	*1-535-115-00	TERMINAL			
522	*1-535-117-00	TERMINAL			
523	*1-560-242-11	BUS BAR 3P			
524	*1-560-242-61	BUS BAR 2P			
525	*1-535-114-00	TERMINAL			
526	*1-616-505-12	PC BOARD, INPUT			
527	*1-616-507-11	(G-AEP)...PC BOARD, SP-B			
528	*1-616-508-11	(G-AEP)...PC BOARD, SP-A			
529	*1-508-831-12	H TYPE BASE POST			
530	⚠ .1-526-565-00	(E)....AC PLUG ADAPTOR			
531	⚠ .1-551-884-00	(UK)..........CORD, POWER			
	⚠ .1-555-795-00	(AEP,G-AEP)...CORD, POWER			
	⚠ .1-556-091-00	(E)...........CORD, POWER			
	⚠ .1-557-577-11	(US)..........CORD, POWER			
532	*1-562-327-00	SOCKET, CONNECTOR 3P			
533	*1-562-249-00	SOCKET, CONNECTOR 4P			
534	*1-508-878-00	BASE POST			
C101	1-161-317-00	CERAMIC	330PF	10%	50V
C201	1-102-112-00	CERAMIC	330PF	10%	50V
C202	1-123-369-00	ELECT	4.7MF	20%	25V
C203	1-161-383-00	CERAMIC	0.0047MF	10%	50V
C204	1-123-333-00	ELECT	100MF	20%	16V
C205	1-130-341-00	FILM	0.056MF	3%	100V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C206	1-130-971-00	FILM	0.016MF	3%	100V
C207	1-124-183-00	ELECT	2.2MF	20%	50V
C208	1-123-307-00	ELECT	100MF	20%	10V
C209	1-123-330-00	ELECT	22MF	20%	25V
C210	1-123-330-00	ELECT	22MF	20%	25V
C251	1-102-112-00	CERAMIC	330PF	10%	50V
C252	1-123-369-00	ELECT	4.7MF	20%	25V
C253	1-161-383-00	CERAMIC	0.0047MF	10%	50V
C254	1-123-333-00	ELECT	100MF	20%	16V
C255	1-130-341-00	FILM	0.056MF	3%	100V
C256	1-130-971-00	FILM	0.016MF	3%	100V
C257	1-124-183-00	ELECT	2.2MF	20%	50V
C258	1-123-307-00	ELECT	100MF	20%	10V
C301	1-136-169-00	FILM	0.22MF	5%	50V
C302	1-124-183-00	ELECT	2.2MF	20%	50V
C303	1-124-183-00	ELECT	2.2MF	20%	50V
C304	1-124-183-00	ELECT	2.2MF	20%	50V
C305	1-123-330-00	ELECT	22MF	20%	25V
C306	1-123-330-00	ELECT	22MF	20%	25V
C351	1-136-169-00	FILM	0.22MF	5%	50V
C352	1-124-183-00	ELECT	2.2MF	20%	50V
C353	1-124-183-00	ELECT	2.2MF	20%	50V
C354	1-124-183-00	ELECT	2.2MF	20%	50V
C401	1-123-645-00	ELECT	33MF	20%	10V
C402	1-123-311-00	ELECT	1000MF	20%	10V
C403	1-123-645-00	ELECT	33MF	20%	10V
C404	1-123-311-00	ELECT	1000MF	20%	10V
C405	1-123-645-00	ELECT	33MF	20%	10V
C406	1-123-645-00	ELECT	33MF	20%	10V
C407	1-123-645-00	ELECT	33MF	20%	10V
C501	1-102-110-00	CERAMIC	220PF	10%	50V
C502	1-102-945-00	CERAMIC	8PF	1PF	50V
C503	1-123-306-00	ELECT	47MF	20%	10V
C504	1-123-307-00	ELECT	100MF	20%	10V
C505	1-123-306-00	ELECT	47MF	20%	10V
C506	1-124-183-00	ELECT	2.2MF	20%	50V
C507	1-102-947-00	CERAMIC	10PF	5%	50V
C508	1-124-186-00	ELECT	10MF	20%	50V
C509	1-102-127-21	CERAMIC	0.0068MF	10%	50V
C510	1-161-061-91	CERAMIC	0.068MF	10%	50V
C511	1-161-059-00	CERAMIC	0.047MF	10%	50V
C512	1-136-173-00	FILM	0.47MF	5%	50V
C513	1-136-167-00	FILM	0.15MF	5%	50V
C514	1-161-161-00	(US)....CERAMIC	0.047MF	10%	50V
C514	1-161-055-00	(UK,AEP,G-AEP,E) ...CAP, CERAMIC	0.022MF	10%	50V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C515	1-161-161-00	CERAMIC	0.047MF	10%	50V
C551	1-102-110-00	CERAMIC	220PF	10%	50V
C552	1-102-945-00	CERAMIC	8PF	1PF	50V
C553	1-123-306-00	ELECT	47MF	20%	10V
C554	1-123-307-00	ELECT	100MF	20%	10V
C555	1-123-306-00	ELECT	47MF	20%	10V
C556	1-124-183-00	ELECT	2.2MF	20%	50V
C557	1-102-947-00	CERAMIC	10PF	5%	50V
C558	1-124-186-00	ELECT	10MF	20%	50V
C559	1-102-127-21	CERAMIC	0.0068MF	10%	50V
C560	1-161-061-91	CERAMIC	0.068MF	10%	50V
C561	1-161-059-00	CERAMIC	0.047MF	10%	50V
C562	1-136-173-00	FILM	0.47MF	5%	50V
C563	1-136-167-00	FILM	0.15MF	5%	50V
C564	1-161-161-00	(US)....CERAMIC	0.047MF	10%	50V
C564	1-161-055-00	(UK,AEP,G-AEP,E) ....CAP, CERAMIC	0.022MF	10%	50V
C565	1-161-161-00	CERAMIC	0.047MF	10%	50V
C601	1-123-369-00	ELECT	4.7MF	20%	25V
C602	1-161-494-00	CERAMIC	0.022MF	30%	25V
C603	1-123-307-00	ELECT	100MF	20%	6.3V
C604	1-102-074-00	CERAMIC	0.001MF	10%	50V
C605	1-123-308-00	ELECT	220MF	20%	6.3V
C701	1-129-701-00	FILM	0.01MF	5%	100V
C702	1-129-701-00	FILM	0.01MF	5%	100V
C703	1-125-405-11	CAP, ELECT	12000MF		63V
C704	1-125-405-11	CAP, ELECT	12000MF		63V
C705	1-123-364-00	ELECT	1000MF	20%	50V
C706	1-123-364-00	ELECT	1000MF	20%	50V
C707	1-123-307-00	ELECT	100MF	20%	10V
C708	1-102-959-00	CERAMIC	22PF	5%	50V
C709	1-102-959-00	CERAMIC	22PF	5%	50V
C710	1-123-337-00	ELECT	1000MF	20%	25V
C711	1-123-337-00	ELECT	1000MF	20%	25V
C712	1-123-821-00	ELECT	47MF	20%	16V
C713	1-123-821-00	ELECT	47MF	20%	16V
C714	1-123-818-00	ELECT	22MF	20%	25V
C715	1-123-361-00	ELECT	220MF	20%	50V
C801⚠	.1-161-744-00	CERAMIC	0.01MF		400V
C802⚠	.1-161-744-00	(AEP,G-AEP,UK)...CERAMIC	0.01MF		400V
C901	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C902	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C903	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C904	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C905	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C906	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C907	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C908	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C921	1-161-279-00	(US,AEP,UK,E)...CERAMIC	10PF	5%	50V
C922	1-102-959-00	CERAMIC	22PF	5%	50V
C971	1-161-279-00	(US,AEP,UK,E)...CERAMIC	10PF	5%	50V
C972	1-102-959-00	CERAMIC	22PF	5%	50V
C911	1-161-323-00	(G-AEP)...CAP, CERAMIC	0.001MF	10%	50V
C921	1-161-267-00	(G-AEP)...CAP, CERAMIC	47PF	5%	50V
C923	1-161-330-00	(G-AEP)...CAP, CERAMIC	0.01MF	30%	25V
C931	1-129-794-00	(G-AEP)...CAP, PP FILM	0.0033MF	5%	100V
C932	1-161-330-00	(G-AEP)...CAP, CERAMIC	0.01MF	30%	25V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C941	1-161-383-00	(G-AEP)...CAP, CERAMIC	0.0047MF	10%	50V
C942	1-161-383-00	(G-AEP)...CAP, CERAMIC	0.0047MF	10%	50V
C943	1-161-285-00	(G-AEP)...CAP, CERAMIC	33PF	5%	50V
C951	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C952	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C953	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C954	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C955	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C956	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C957	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C958	1-161-317-00	(G-AEP)...CAP, CERAMIC	330PF	10%	50V
C961	1-161-323-00	(G-AEP)...CAP, CERAMIC	0.001MF	10%	50V
C971	1-161-267-00	(G-AEP)...CAP, CERAMIC	47PF	5%	50V
C973	1-161-330-00	(G-AEP)...CAP, CERAMIC	0.01MF	30%	25V
C991	1-161-383-00	(G-AEP)...CAP, CERAMIC	0.0047MF	10%	50V
C992	1-161-383-00	(G-AEP)...CAP, CERAMIC	0.0047MF	10%	50V
C993	1-161-285-00	(G-AEP)...CAP, CERAMIC	33PF	5%	50V
CN801⚠	.1-526-695-00	(E)...........OUTLET, AC			
CN801⚠	.1-526-751-00	(UK)..........OUTLET, AC			
CN801⚠	.1-526-794-11	(AEP,G-AEP)...OUTLET, AC			
CN801⚠	.1-526-883-00	(US)..........OUTLET, AC			
CN802⚠	.1-526-883-00	(US).....OUTLET, AC			
CNP1	*1-560-061-00	PIN, CONNECTOR 3P			
CNP2	*1-560-062-00	PIN, CONNECTOR 4P			
CNP3	*1-560-062-00	PIN, CONNECTOR 4P			
CNP4	*1-560-062-00	PIN, CONNECTOR 4P			
CNP5	*1-560-062-00	PIN, CONNECTOR 4P			
CNP6	*1-560-061-00	PIN, CONNECTOR 3P			
CNP7	*1-560-061-00	PIN, CONNECTOR 3P			
CNP8	*1-560-061-00	PIN, CONNECTOR 3P			
CNP9	*1-560-061-00	PIN, CONNECTOR 3P			
CNP10	*1-560-061-00	PIN, CONNECTOR 3P			
CNP11	*1-560-061-00	PIN, CONNECTOR 3P			
CNP12	*1-560-061-00	PIN, CONNECTOR 3P			
CNP13	*1-560-061-00	PIN, CONNECTOR 3P			
CNP14	*1-560-061-00	PIN, CONNECTOR 3P			
CNP15	*1-560-061-00	PIN, CONNECTOR 3P			
CNP16	*1-560-061-00	PIN, CONNECTOR 3P			
CNP17	*1-560-061-00	PIN, CONNECTOR 3P			
CNP18	*1-560-061-00	PIN, CONNECTOR 3P			
CNP19	*1-560-061-00	PIN, CONNECTOR 3P			
CNP20	*1-560-061-00	PIN, CONNECTOR 3P			
CNP21	*1-560-061-00	PIN, CONNECTOR 3P			
CNP22	*1-560-061-00	PIN, CONNECTOR 3P			
CNP23	*1-560-061-00	PIN, CONNECTOR 3P			
CNP24	*1-560-061-00	PIN, CONNECTOR 3P			
CNP25	*1-560-061-00	PIN, CONNECTOR 3P			
CNP26	*1-560-061-00	PIN, CONNECTOR 3P			
CNP28	*1-560-061-00	PIN, CONNECTOR 3P			
CNP30	*1-560-061-00	PIN, CONNECTOR 3P			
CNP31	*1-560-061-00	PIN, CONNECTOR 3P			
CNP32	*1-560-062-00	PIN, CONNECTOR 4P			
CNP33	*1-560-061-00	PIN, CONNECTOR 3P			
CNP34	*1-560-062-00	PIN, CONNECTOR 4P			
CNP35	*1-560-062-00	PIN, CONNECTOR 4P			
CNP36	*1-560-061-00	PIN, CONNECTOR 3P			

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

ELECTRICAL PARTS

Ref.No.	Part No.	Description
CNP39	*1-560-061-00	PIN, CONNECTOR 3P
CNP40	*1-560-061-00	PIN, CONNECTOR 3P
CNP41	*1-560-061-00	PIN, CONNECTOR 3P
CNP51	*1-564-506-11	PLUG, CONNECTOR 3P
CNP52	*1-564-506-11	PLUG, CONNECTOR 3P
CNP53	*1-564-506-11	PLUG, CONNECTOR 3P
CNP54	*1-564-506-11	PLUG, CONNECTOR 3P
CNP55	*1-564-506-11	PLUG, CONNECTOR 3P
CNP56	*1-564-506-11	PLUG, CONNECTOR 3P
CNP57	*1-564-506-11	PLUG, CONNECTOR 3P
CNP58	*1-564-506-11	PLUG, CONNECTOR 3P
CNP59	*1-564-506-11	PLUG, CONNECTOR 3P
CNP60	*1-564-506-11	PLUG, CONNECTOR 3P
CNP61	*1-564-506-11	PLUG, CONNECTOR 3P
CNP62	*1-564-506-11	PLUG, CONNECTOR 3P
D201	8-719-100-42	DIODE RD6.8E-B3
D211	8-719-905-06	DIODE GL-5NG6
D212	8-719-905-06	DIODE GL-5NG6
D213	8-719-905-06	DIODE GL-5NG6
D214	8-719-905-06	DIODE GL-5NG6
D215	8-719-905-06	DIODE GL-5NG6
D216	8-719-905-06	DIODE GL-5NG6
D217	8-719-905-06	DIODE GL-5NG6
D218	8-719-900-21	DIODE GL-2HY1
D251	8-719-100-42	DIODE RD6.8E-B3
D501	8-719-100-57	DIODE RD10E-B2
D502	8-719-902-97	DIODE EQA01-06R2
D503	8-719-107-94	DIODE 1SS202-1
D504	8-719-107-94	DIODE 1SS202-1
D505	8-719-107-94	DIODE 1SS202-1
D506	8-719-107-94	DIODE 1SS202-1
D507	8-719-107-94	DIODE 1SS202-1
D551	8-719-100-57	DIODE RD10E-B2
D552	8-719-902-97	DIODE EQA01-06R2
D553	8-719-107-94	DIODE 1SS202-1
D554	8-719-107-94	DIODE 1SS202-1
D555	8-719-107-94	DIODE 1SS202-1
D556	8-719-107-94	DIODE 1SS202-1
D557	8-719-107-94	DIODE 1SS202-1
D601	8-719-200-02	DIODE 10E-2
D602	8-719-107-94	DIODE 1SS202-1
D603	8-719-905-06	DIODE GL-5NG6
D604	8-719-107-94	DIODE 1SS202-1
D605	8-719-107-94	DIODE 1SS202-1
D654	8-719-107-94	DIODE 1SS202-1
D655	8-719-107-94	DIODE 1SS202-1
D701	8-719-230-24	DIODE 30DL4
D702	8-719-230-24	DIODE 30DL4
D703	8-719-230-24	DIODE 30DL4
D704	8-719-230-24	DIODE 30DL4
D705	8-719-902-97	DIODE EQA01-06R2
D706	8-719-936-12	DIODE EQA01-12R
F801	⚠.1-532-272-XX	(US)...............FUSE 5.0A
F801	⚠.1-532-286-00	(AEP,G-AEP,UK,E)...FUSE 2.5A TIME-LAG
F802	⚠.1-532-286-00	(AEP,G-AEP,UK,E)...FUSE 2.5A TIME-LAG
IC201	8-759-923-90	IC BA4560
IC301	8-759-900-72	IC NE5532P
IC302	8-759-990-82	IC TL082CP

ELECTRICAL PARTS

Ref.No.	Part No.	Description
IC351	8-759-900-72	IC NE5532P
IC401	8-759-801-61	IC LA7220
IC601	8-759-101-23	IC UPC1237H
J101	1-507-910-11	JACK, PIN 4P
J102	1-507-914-21	JACK, PIN 6P
J103	1-507-914-21	JACK, PIN 6P
J104	1-507-914-21	JACK, PIN 6P
J105	1-562-916-11	JACK, PIN 2P
J106	1-562-916-11	JACK, PIN 2P
J501	1-507-669-00	JACK (HEADPHONE)
L501	*1-422-031-00	COIL, AIRCORE
L551	*1-422-031-00	COIL, AIRCORE
L901	1-413-101-00	(G-AEP)...COIL, INPUT 220UH
L902	1-413-101-00	(G-AEP)...COIL, INPUT 220UH
L951	1-413-101-00	(G-AEP)...COIL, INPUT 220UH
L952	1-413-101-00	(G-AEP)...COIL, INPUT 220UH
PT801	⚠.1-448-173-11	(US)..........TRANSFORMER, POWER
PT801	⚠.1-448-264-11	(UK)..........TRANSFORMER, POWER
PT801	⚠.1-448-265-11	(E)...........TRANSFORMER, POWER
PT801	⚠.1-448-266-11	(AEP,G-AEP)...TRANSFORMER, POWER
Q201	8-729-354-52	TRANSISTOR 2SC2545-E
Q202	8-729-354-52	TRANSISTOR 2SC2545-E
Q251	8-729-354-52	TRANSISTOR 2SC2545-E
Q252	8-729-354-52	TRANSISTOR 2SC2545-E
Q401	8-729-606-33	TRANSISTOR 2SC2603F
Q402	8-729-606-33	TRANSISTOR 2SC2603F
Q403	8-729-606-33	TRANSISTOR 2SC2603F
Q404	8-729-107-98	TRANSISTOR 2SC3622A-L
Q501	8-759-103-64	TRANSISTOR UPA68H-K
Q502	8-729-663-47	TRANSISTOR 2SC1364
Q503	8-729-663-47	TRANSISTOR 2SC1364
Q504	8-729-612-77	TRANSISTOR 2SA1027R
Q505	8-729-612-77	TRANSISTOR 2SA1027R
Q506	8-729-366-61	TRANSISTOR 2SD666-B
Q507	8-729-612-77	TRANSISTOR 2SA1027R
Q508	8-729-104-91	TRANSISTOR 2SA1383
Q509	8-729-104-18	TRANSISTOR 2SC3514
Q510	8-729-180-93	TRANSISTOR 2SD809
Q511	8-729-107-53	TRANSISTOR 2SC2275A
Q512	8-729-118-53	TRANSISTOR 2SA985P
Q513	8-729-301-82	(US)...............TRANSISTOR 2SC3519Y
Q513	8-729-302-83	(AEP,G-AEP,UK,E)...TRANSISTOR 2SC3284
Q514	8-729-301-86	(US)...............TRANSISTOR 2SA1386Y
Q514	8-729-302-80	(AEP,G-AEP,UK,E)...TRANSISTOR 2SA1303
Q551	8-759-103-64	TRANSISTOR UPA68H-K
Q552	8-729-663-47	TRANSISTOR 2SC1364
Q553	8-729-663-47	TRANSISTOR 2SC1364
Q554	8-729-612-77	TRANSISTOR 2SA1027R
Q555	8-729-612-77	TRANSISTOR 2SA1027R
Q556	8-729-366-61	TRANSISTOR 2SD666-B
Q557	8-729-612-77	TRANSISTOR 2SA1027R
Q558	8-729-104-91	TRANSISTOR 2SA1383
Q559	8-729-104-18	TRANSISTOR 2SC3514
Q560	8-729-180-93	TRANSISTOR 2SD809
Q561	8-729-107-53	TRANSISTOR 2SC2275A
Q562	8-729-118-53	TRANSISTOR 2SA985P

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
Q563	8-729-301-82	(US)..............TRANSISTOR 2SC3519Y			
Q563	8-729-302-83	(AEP,G-AEP,UK,E)...TRANSISTOR 2SC3284			
Q564	8-729-301-86	(US)..............TRANSISTOR 2SA1386Y			
Q564	8-729-302-80	(AEP,G-AEP,UK,E)...TRANSISTOR 2SA1303			
Q601	8-729-612-77	TRANSISTOR 2SA1027R			
Q651	8-729-612-77	TRANSISTOR 2SA1027R			
Q701	8-729-201-56	TRANSISTOR 2SK246-GR2			
Q702	8-729-201-56	TRANSISTOR 2SK246-GR2			
Q703	8-729-606-33	TRANSISTOR 2SC2603F			
Q704	8-729-612-77	TRANSISTOR 2SA1027R			
Q705	8-729-103-33	TRANSISTOR 2SD1310			
Q706	8-729-377-12	TRANSISTOR 2SA771			
Q707	8-729-606-33	TRANSISTOR 2SC2603F			
Q708	8-729-612-77	TRANSISTOR 2SA1027R			
Q709	8-729-180-93	TRANSISTOR 2SD809			
R101	1-246-545-00	CARBON	1M	5%	1/4W
R102	1-246-545-00	CARBON	1M	5%	1/4W
R103	1-246-545-00	CARBON	1M	5%	1/4W
R104	1-247-713-11	CARBON	1K	5%	1/4W
R105	1-246-545-00	CARBON	1M	5%	1/4W
R106	1-246-545-00	CARBON	1M	5%	1/4W
R107	1-247-713-11	CARBON	1K	5%	1/4W
R108	1-246-545-00	CARBON	1M	5%	1/4W
R109	1-246-545-00	CARBON	1M	5%	1/4W
R110	1-247-713-11	CARBON	1K	5%	1/4W
R151	1-246-545-00	CARBON	1M	5%	1/4W
R152	1-246-545-00	CARBON	1M	5%	1/4W
R153	1-246-545-00	CARBON	1M	5%	1/4W
R154	1-247-713-11	CARBON	1K	5%	1/4W
R155	1-246-545-00	CARBON	1M	5%	1/4W
R156	1-246-545-00	CARBON	1M	5%	1/4W
R157	1-247-713-11	CARBON	1K	5%	1/4W
R158	1-246-545-00	CARBON	1M	5%	1/4W
R159	1-246-545-00	CARBON	1M	5%	1/4W
R160	1-247-713-11	(US,AEP,UK,E)...CARBON	1K	5%	1/4W
R201	1-247-119-00	(US,AEP,UK,E)...CARBON	330	5%	1/4W
R201	1-247-702-11	(G-AEP)...RES, CARBON	150	5%	1/4W
R202	1-247-700-11	CARBON	100	5%	1/4W
R203	1-249-469-11	CARBON	100K	5%	1/4W
R204	1-249-469-11	CARBON	100K	5%	1/4W
R205	1-247-713-11	CARBON	1K	5%	1/4W
R206	1-247-713-11	CARBON	1K	5%	1/4W
R207	1-247-700-11	CARBON	100	5%	1/4W
R208	1-247-725-11	CARBON	10K	5%	1/4W
R209	1-249-286-11	CARBON	1.5M	5%	1/3W
R210	1-214-771-00	METAL	56K	1%	1/4W
R211	1-214-745-00	METAL	4.7K	1%	1/4W
R212	1-214-705-00	METAL	100	1%	1/4W
R213	1-214-677-00	METAL	6.8	1%	1/4W
R214	1-247-704-11	CARBON	220	5%	1/4W
R215	1-249-469-11	CARBON	100K	5%	1/4W
R216	1-247-135-00	CARBON	1.5K	5%	1/4W
R251	1-247-119-00	(US,AEP,UK,E)...CARBON	330	5%	1/4W
R251	1-247-702-11	(G-AEP)...RES, CARBON	150	5%	1/4W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R252	1-247-700-11	CARBON	100	5%	1/4W
R253	1-249-469-11	CARBON	100K	5%	1/4W
R254	1-249-469-11	CARBON	100K	5%	1/4W
R255	1-247-713-11	CARBON	1K	5%	1/4W
R256	1-247-713-11	CARBON	1K	5%	1/4W
R257	1-247-700-11	CARBON	100	5%	1/4W
R258	1-247-725-11	CARBON	10K	5%	1/4W
R259	1-249-286-11	CARBON	1.5M	5%	1/3W
R260	1-214-771-00	METAL	56K	1%	1/4W
R261	1-214-745-00	METAL	4.7K	1%	1/4W
R262	1-214-705-00	METAL	100	1%	1/4W
R263	1-214-677-00	METAL	6.8	1%	1/4W
R264	1-247-704-11	CARBON	220	5%	1/4W
R265	1-249-469-11	CARBON	100K	5%	1/4W
R266	1-247-135-00	CARBON	1.5K	5%	1/4W
R301	1-249-469-11	CARBON	100K	5%	1/4W
R302	1-214-733-00	METAL	1.5K	1%	1/4W
R303	1-214-727-00	METAL	820	1%	1/4W
R304	1-214-727-00	METAL	820	1%	1/4W
R305	1-214-733-00	METAL	1.5K	1%	1/4W
R306	1-249-469-11	CARBON	100K	5%	1/4W
R307	1-249-469-11	CARBON	100K	5%	1/4W
R308	1-247-708-11	CARBON	470	5%	1/4W
R309	1-247-725-11	CARBON	10K	5%	1/4W
R310	1-247-119-00	CARBON	330	5%	1/4W
R330	1-247-708-11	CARBON	470	5%	1/4W
R351	1-249-469-11	CARBON	100K	5%	1/4W
R352	1-214-733-00	METAL	1.5K	1%	1/4W
R353	1-214-727-00	METAL	820	1%	1/4W
R354	1-214-727-00	METAL	820	1%	1/4W
R355	1-214-733-00	METAL	1.5K	1%	1/4W
R356	1-249-469-11	CARBON	100K	5%	1/4W
R357	1-249-469-11	CARBON	100K	5%	1/4W
R358	1-247-708-11	CARBON	470	5%	1/4W
R359	1-247-725-11	CARBON	10K	5%	1/4W
R360	1-247-119-00	CARBON	330	5%	1/4W
R380	1-247-708-11	CARBON	470	5%	1/4W
R401	1-247-702-11	CARBON	150	5%	1/4W
R402	1-247-702-11	CARBON	150	5%	1/4W
R403	1-247-725-11	CARBON	10K	5%	1/4W
R404	1-247-702-11	CARBON	150	5%	1/4W
R405	1-247-702-11	CARBON	150	5%	1/4W
R406	1-247-725-11	CARBON	10K	5%	1/4W
R407	1-247-696-11	CARBON	47	5%	1/4W
R408	1-247-125-00	CARBON	560	5%	1/4W
R409	1-247-696-11	CARBON	47	5%	1/4W
R410	1-247-125-00	CARBON	560	5%	1/4W
R411	1-247-167-00	CARBON	33K	5%	1/4W
R412	1-247-177-00	CARBON	82K	5%	1/4W
R413	1-247-129-00	CARBON	820	5%	1/4W
R414	1-247-143-00	CARBON	3.3K	5%	1/4W
R415	1-247-143-00	CARBON	3.3K	5%	1/4W
R416	1-247-149-00	CARBON	5.6K	5%	1/4W
R417	1-247-713-11	CARBON	1K	5%	1/4W
R418	1-249-469-11	CARBON	100K	5%	1/4W
R419	1-247-725-11	CARBON	10K	5%	1/4W
R420	1-247-163-00	CARBON	22K	5%	1/4W

ELECTRICAL PARTS

Ref.No.	Part No.	Description				
R421	1-247-721-11	CARBON	4.7K	5%	1/4W	
R501	1-247-700-11	CARBON	100	5%	1/4W	
R502	1-246-545-00	CARBON	1M	5%	1/4W	
R503 ⚠	1-212-889-91	FUSIBLE	220	5%	1/4W	F
R504 ⚠	1-212-889-91	FUSIBLE	220	5%	1/4W	F
R505	1-247-708-11	CARBON	470	5%	1/4W	
R506	1-247-274-00	CARBON	27K	5%	1/2W	
R507 ⚠	1-247-131-00	CARBON	1K	5%	1/4W	F
R508 ⚠	1-212-883-00	FUSIBLE	120	5%	1/4W	F
R509 ⚠	1-213-160-11	METAL OXIDE	27K	5%	1W	F
R510	1-247-721-11	CARBON	4.7K	5%	1/4W	
R511 ⚠	1-217-399-00	FUSIBLE	100	5%	1/4W	F
R512	1-247-717-11	CARBON	2.2K	5%	1/4W	
R513	1-247-125-00	CARBON	560	5%	1/4W	
R514 ⚠	1-217-391-00	FUSIBLE	22	5%	1/4W	F
R515 ⚠	1-217-391-00	FUSIBLE	22	5%	1/4W	F
R516 ⚠	1-212-984-00	FUSIBLE	120	5%	1/2W	F
R517 ⚠	1-217-430-00	FUSIBLE	4.7	5%	1/2W	F
R518 ⚠	1-217-430-00	FUSIBLE	4.7	5%	1/2W	F
R519	1-217-657-11	RES, METAL PLATE 0.1				
R520	1-217-657-11	RES, METAL PLATE 0.1				
R521	1-244-945-00	CARBON	1M	5%	1/3W	
R522	1-247-717-11	CARBON	2.2K	5%	1/4W	
R523	1-247-167-00	CARBON	33K	5%	1/4W	
R524	1-247-135-00	CARBON	1.5K	5%	1/4W	
R525	1-247-145-00	CARBON	3.9K	5%	1/4W	
R526	1-247-704-11	CARBON	220	5%	1/4W	
R527	1-247-149-00	CARBON	5.6K	5%	1/4W	
R528	1-247-127-00	CARBON	680	5%	1/4W	
R529	1-247-153-00	CARBON	8.2K	5%	1/4W	
R530	1-246-545-00	CARBON	1M	5%	1/4W	
R531 ⚠	1-217-434-00	FUSIBLE	10	5%	1/2W	F
R532	1-247-192-00	CARBON	10	5%	1/2W	
R533 ⚠	1-206-656-00	METAL OXIDE	470	5%	2W	F
R534 ⚠	1-217-391-00	(US).....FUSIBLE	22	5%	1/4W	F
R551	1-247-700-11	CARBON	100	5%	1/4W	
R552	1-246-545-00	CARBON	1M	5%	1/4W	
R553 ⚠	1-212-889-91	FUSIBLE	220	5%	1/4W	F
R554 ⚠	1-212-889-91	FUSIBLE	220	5%	1/4W	F
R555	1-247-708-11	CARBON	470	5%	1/4W	
R556	1-247-274-00	CARBON	27K	5%	1/2W	
R557 ⚠	1-247-131-00	CARBON	1K	5%	1/4W	F
R558 ⚠	1-212-883-00	FUSIBLE	120	5%	1/4W	F
R559 ⚠	1-213-160-11	METAL OXIDE	27K	5%	1W	F
R560	1-247-721-11	CARBON	4.7K	5%	1/4W	
R561 ⚠	1-217-399-00	FUSIBLE	100	5%	1/4W	F
R562	1-247-717-11	CARBON	2.2K	5%	1/4W	
R563	1-247-125-00	CARBON	560	5%	1/4W	
R564 ⚠	1-217-391-00	FUSIBLE	22	5%	1/4W	F
R565 ⚠	1-217-391-00	FUSIBLE	22	5%	1/4W	F
R566 ⚠	1-212-984-00	FUSIBLE	120	5%	1/2W	F
R567 ⚠	1-217-430-00	FUSIBLE	4.7	5%	1/2W	F
R568 ⚠	1-217-430-00	FUSIBLE	4.7	5%	1/2W	F
R569	1-217-657-11	RES, METAL PLATE 0.1				
R570	1-217-657-11	RES, METAL PLATE 0.1				
R571	1-244-945-00	CARBON	1M	5%	1/3W	
R572	1-247-717-11	CARBON	2.2K	5%	1/4W	

ELECTRICAL PARTS

Ref.No.	Part No.	Description				
R573	1-247-167-00	CARBON	33K	5%	1/4W	
R574	1-247-135-00	CARBON	1.5K	5%	1/4W	
R575	1-247-145-00	CARBON	3.9K	5%	1/4W	
R576	1-247-704-11	CARBON	220	5%	1/4W	
R577	1-247-149-00	CARBON	5.6K	5%	1/4W	
R578	1-247-127-00	CARBON	680	5%	1/4W	
R579	1-247-153-00	CARBON	8.2K	5%	1/4W	
R580	1-246-545-00	CARBON	1M	5%	1/4W	
R581 ⚠	1-217-434-00	FUSIBLE	10	5%	1/2W	F
R582	1-247-192-00	CARBON	10	5%	1/2W	
R583 ⚠	1-206-656-00	METAL OXIDE	470	5%	2W	F
R584 ⚠	1-217-391-00	(US)....FUSIBLE	22	5%	1/4W	F
R601	1-247-270-00	CARBON	18K	5%	1/2W	
R602	1-247-264-00	CARBON	10K	5%	1/2W	
R603	1-247-175-00	CARBON	68K	5%	1/4W	
R604	1-247-218-00	CARBON	120	5%	1/2W	
R605	1-247-216-00	CARBON	100	5%	1/2W	
R606	1-247-725-11	CARBON	10K	5%	1/4W	
R607 ⚠	1-247-141-00	CARBON	2.7K	5%	1/4W	F
R608	1-247-163-00	CARBON	22K	5%	1/4W	
R609	1-246-529-00	CARBON	220K	5%	1/4W	
R610	1-246-533-00	CARBON	330K	5%	1/4W	
R657 ⚠	1-247-141-00	CARBON	2.7K	5%	1/4W	F
R658	1-247-163-00	CARBON	22K	5%	1/4W	
R660	1-246-533-00	CARBON	330K	5%	1/4W	
R701 ⚠	1-206-701-00	METAL OXIDE	100	5%	3W	F
R702 ⚠	1-206-652-11	METAL OXIDE	330	5%	2W	F
R703	1-247-713-11	CARBON	1K	5%	1/4W	
R704	1-247-713-11	CARBON	1K	5%	1/4W	
R705	1-247-721-11	CARBON	4.7K	5%	1/4W	
R706	1-214-751-00	METAL	8.2K	1%	1/4W	
R707	1-214-748-00	METAL	6.2K	1%	1/4W	
R708	1-214-757-00	METAL	15K	1%	1/4W	
R709	1-214-757-00	METAL	15K	1%	1/4W	
R710	1-246-527-00	CARBON	180K	5%	1/4W	
R711	1-247-713-11	CARBON	1K	5%	1/4W	
R712 ⚠	1-206-717-00	METAL OXIDE	470	5%	3W	F
R713 ⚠	1-206-664-00	METAL OXIDE	1K	5%	2W	F
R714 ⚠	1-206-664-11	METAL OXIDE	1K	5%	2W	F
R715	1-247-700-11	CARBON	100	5%	1/4W	
R716	1-247-749-11	CARBON	560	5%	1/2W	
R717	1-247-704-11	CARBON	220	5%	1/4W	
R718	1-247-749-11	CARBON	560	5%	1/2W	
R751 ⚠	1-206-701-00	METAL OXIDE	100	5%	3W	F
R901	1-247-119-00	(G-AEP)...RES, CARBON	330	5%	1/4W	
R902	1-247-119-00	(G-AEP)...RES, CARBON	330	5%	1/4W	
R903	1-247-708-00	(G-AEP)...RES, CARBON	470	5%	1/4W	
R904	1-247-708-00	(G-AEP)...RES, CARBON	470	5%	1/4W	
R905	1-247-708-00	(G-AEP)...RES, CARBON	470	5%	1/4W	
R906	1-247-708-00	(G-AEP)...RES, CARBON	470	5%	1/4W	
R907	1-247-708-00	(G-AEP)...RES, CARBON	470	5%	1/4W	
R908	1-247-708-00	(G-AEP)...RES, CARBON	470	5%	1/4W	
R909	1-247-708-00	(G-AEP)...RES, CARBON	470	5%	1/4W	
R941 ⚠	1-217-434-00	(G-AEP)...RES, FUSE	10	5%	1/2W	
R942 ⚠	1-217-434-00	(G-AEP)...RES, FUSE	10	5%	1/2W	
R943	1-247-704-11	(G-AEP)...RES, CARBON	220	5%	1/4W	
R951	1-247-119-00	(G-AEP)...RES, CARBON	330	5%	1/4W	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

ELECTRICAL PARTS

Ref.No.	Part No.	Description
R952	1-247-119-00	(G-AEP)...RES, CARBON 330 5% 1/4W
R953	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R954	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R955	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R956	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R957	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R958	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R959	1-247-708-00	(G-AEP)...RES, CARBON 470 5% 1/4W
R991 ⚠	1-217-434-00	(G-AEP)...RES, FUSE 10 5% 1/2W
R992 ⚠	1-217-434-00	(G-AEP)...RES, FUSE 10 5% 1/2W
R993	1-247-704-11	(G-AEP)...RES, CARBON 220 5% 1/4W
RT501	1-224-248-XX	RES, ADJ, SOLID 470
RT551	1-224-248-XX	RES, ADJ, SOLID 470
RV301	1-230-926-11	RES, VAR, CARBON 100K/100K (WITH RV351) (BALANCE)
RV302	1-230-657-11	RES, VAR, CARBON 10K/10K (WITH RV352) (ATTENUATOR)
RV501	1-230-925-11	RES, VAR, CARBON 37K/37K (WITH RV551) (TREBLE)
RV502	1-230-924-11	RES, VAR, CARBON 24K/24K (WITH RV552) (BASS)
RY501	1-515-356-00	RELAY
S201	1-570-365-11	SWITCH, ROTARY SLIDE (CARTRIDGE)
S301	1-570-075-11	SWITCH, PUSH (7 KEY)(FUNCTION)
S302	1-570-367-11	SWITCH, PUSH (2 KEY)(WITH S303)(EQ/SUB)
S501	1-570-079-11	SWITCH, PUSH (2 KEY)(WITH S502) (TONE/BASS)
S503	1-570-366-11	SWITCH, ROTARY SLIDE (SPEAKER)
S801 ⚠	1-552-246-00	(US)..............SWITCH, PUSH (POWER)
S801 ⚠	1-554-880-11	(AEP,G-AEP,UK,E)...SWITCH, PUSH (POWER)
TM901	1-536-767-00	TERMINAL BOARD, SPEAKER
TM902	1-536-767-00	TERMINAL BOARD, SPEAKER
VS801 ⚠	1-526-576-31	(E)...SELECTOR, POWER VOLTAGE

ACCESSORY & PACKING MATERIAL

Part No.	Description
2-297-403-00	SHEET (LARGE), PROTECTION
3-701-630-00	BAG, POLYETHYLENE
3-760-648-11	MANUAL, INSTRUCTION
4-885-949-01	CUSHION (FRONT), UPPER
4-885-950-01	CUSHION (REAR), UPPER
4-885-951-01	CUSHION (FRONT), LOWER
4-885-952-01	CUSHION (REAR), LOWER
4-908-833-01	INDIVIDUAL CARTON

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